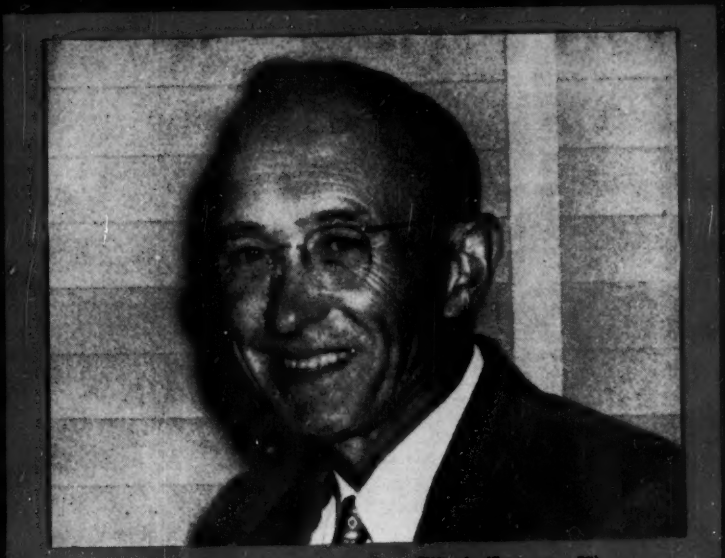
The Soybean Digest



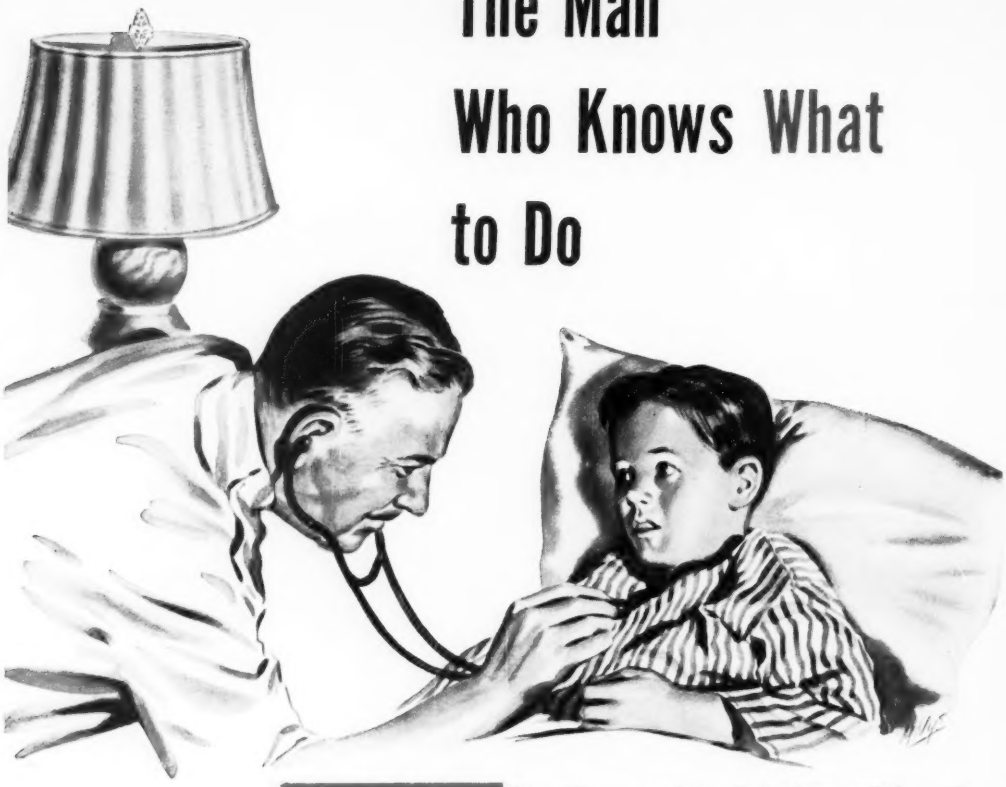
C. G. Ramsey, ASA Director from Illinois (See page 35).

Official Publication

AMERICAN SOYBEAN ASSOCIATION

VOLUME 10 • NUMBER 3 JANUARY • 1950

The Man Who Knows What to Do



"DOC" MacGEE SAYS: When illness strikes, you call in the doctor, the man who *knows* what to do for treatment. When you have legal problems, you seek the advice of the lawyer, the man who *knows* how to solve them.

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Plan now to have a talk with the man who *knows* solvents — a SKELLYSOLVE Technical Fieldman. He represents a company that *knows* how to serve you with dependable, high-quality solvents—Skelly Oil Company. Write us today.

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THE Soybean Digest

REG. U. S. PAT OFF.

HUDSON, IOWA

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THE AMERICAN SOYBEAN ASSOCIATION

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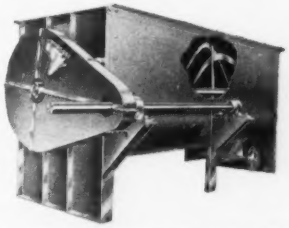

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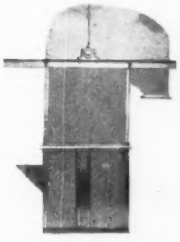

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EDITOR'S DESK

CAREFUL GROWER IS PENALIZED

Reports coming to this office indicate that soybeans reaching the hands of processors are now running so close to the maximum levels in foreign material that there is no question about their being field run beans. Cars are being plugged to the maximum level. Flax screenings, grain screenings, other grains, all kinds of material other than soybeans are being delivered right up to the permissible 3 percent level.

Although we have not yet had a full year's experience under the new soybean grading standards, it would appear that the Sept. 1 change in those standards was a mistake. It is forcing the price of all soybeans down to the level of those containing the maximum percentage of foreign material.

Adequate soybean grading standards should reward the careful grower and handler, penalize the less careful. They should make it possible for the same lot of soybeans to be traded at several levels and always carry the same grade designation. They should insure purity levels which will mean no loss to the processor through contamination with non-soybean materials. They should make it possible for the export buyer to ship beans which will arrive at foreign ports under the same grade designation that applied when they left the growers hands. *Our present standards are not doing that job.*

The general average level of foreign material in soybeans being delivered to processing plants and for export is increasing as the current season progresses. Unless that trend reverses itself we are going to need some changes in the grading standards for soybeans of 1950 crop.

Chief among those changes should be the lowering of the allowable percentages of foreign material in each of the grades. Foreign material allowed in No. 2 soybeans, for instance, in the opinion of your editor should be no more than 2 percent maximum.

Unless we start rewarding the careful producer, stop rewarding the handler who blends junk into good soybeans, we are going to find ourselves with a mess on our hands.

300 MILLION BUSHELS IN 1950?

Recent announcement of the corn acreage allotments for the commercial production areas indicates a decision on acreage controls for soybeans may be just around the corner—perhaps will have been announced when you receive this copy. Whether or not acreage controls are included in the final plans for 1950, there will still be a rather sizable increase in soybean production in 1950—given a normal season.

With no acreage controls there will be heavy increases in the Cornbelt section, and in the cotton and peanut sections where acreages removed from those crops will go into soybeans. With acreage controls, but without those controls tied in with corn, cotton and peanut acreages, there will be a high percentage of non-compliance and thus a heavy increase in soybean acreage.

Under either system we might conceivably produce, given a growing season such as we had in 1949, as high as 300 million bushels of soybeans in 1950. If that size crop should be in the picture, much of the industry had better start doing some fast thinking about the disposition which would be made of it.

Whichever way we go on the 1950 crop—whichever move the Secretary of Agriculture decides is most strategic—we should be doing some serious planning on the sales and merchandising program which will do the best job of moving the products of the soybean industry into the food, feed and industrial channels of the world.

ONE STEP IN RIGHT DIRECTION

The American people have never accepted food products featuring soybeans with the open arms which might be expected for a product so rich in nutritious protein and edible fat. While used in rather large tonnages in the production of many food products, soy protein has not, in most cases, been featured. The story of true value of soy protein has not been told often enough or hard enough to the right people.

A step in the right direction is the recent announcement of the Sova Foods Research Council. Story on that organization is carried elsewhere in this issue. That organization can be of tremendous value to the soybean industry. We wish them well, offer every possible assistance.

Jim Ream, age 9, won second prize with his entry in a junior pet parade at Mechanicsburg, Ohio, last fall.

JIM REAM HAS THE RIGHT IDEA

It's often said that a picture is worth a thousand words. The picture above is worth several thousand words to butter men—if they will only learn the obvious lesson it teaches.

The young man intends to win success as a dairyman and is making a fine start with his registered Jersey heifer. But he will not do it by working for restrictive laws to strangle his competitors.

At 9 years he has achieved a sound philosophy that the butter industry can delay longer to adopt only to its detriment. Each day's delay will lose more friends for butter, will mean more hard effort will have to be expended to overcome the public hostility that has been created by the butter bloc's past actions.

37th YEAR

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No. 372 Thermo-Sampler Torpedo. Combines a thermometer with a cup for extracting a sample from any point in a bin. Enables you to keep check on temperature, moisture and infestation. Extension sections enable you to probe as deeply as needed. No. 372 Thermo-Sampler Torpedo only.....**$15.00**
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Seedburo Hand Type weight-per-bushel tester. New, improved weight-per-bushel tester perfected by Seedburo. Built to give continuous, accurate measurement despite rough usage. Beam readings are *etched* in beam, eliminating variations due to faulty markings. Beam divided to give rapid readings of weight per bushel, percentage of loss in cleaning, and direct weight of sample. Has sliding bevel poise, and dent-proof bucket. Available in four sizes: Half-pint . . . $24.00. Pint . . . $24.00. Quart, (Govt. Standard) $25.50. Two-quart . . . $28.00.

SEEDBURO REPORTER

How can you know when high moisture grain is going out of condition? The best indication that your grain is approaching a critical state is a rising temperature. This condition occurs in wet grain when late spring months become warm. The results frequently are grain heating, spoiling and infestation.

To be forewarned of such a condition in your grain, make frequent temperature checks of stored grains, and keep a record of the readings obtained. In addition, obtain samples of grain from various points in your bins for visual examination for heat damage and infestation.

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ACTIVITIES OF YOUR ASSOCIATION

Joint Effort by Producers and Processors

The first big step in an all out program to increase the consumption of soybean products through sales and education has been taken by a number of Iowa processors during the past month. These processors are joining the producers in putting up hard cash to make it possible for the American Soybean Association to carry out such a program on a scale large enough to be effective.

The idea that processors should back the Association financially since they have at least as large a stake as producers in the soybean crop originated with a group of Iowa processors.

ASA Secretary-Treasurer Geo. M. Strayer presented a definite proposal at the regional processor meeting held in Des Moines, Iowa, Nov. 20.

The proposal as presented by Strayer was this:

1—The American Soybean Association and participating processors will jointly finance a selling and educational program designed to increase the knowledge of and consumption of soybean products.

2—The American Soybean Association will continue with its grower-financed program, with soybean buyers as the collecting agency. Producers will contribute 20c per 100 bushels from their crop. Participating processors will contribute at the outset 50c per 1,000 bushels on their monthly crush.

3—A committee will be named by participating processors to meet with the executive committee of the American Soybean Association. They will advise planning of the program and expenditures of funds.

4—Any program of the type planned must be kept flexible and be designed to meet day-to-day and week-to-week problems. At the same time certain over all objectives can be formulated.

Strayer pointed out that in the light of present developments it is necessary that processors and growers should join to increase consumption of soy products. With the increased acreage of soybeans that is in prospect it is imperative that large volume markets for both soybean oil and meal be found rapidly if the prices of these products are to remain high enough for the processor to pay the producer a fair price and still make a profit on his operations.

What Might Be Done

Some of the jobs that must be done at the present time as Strayer saw them are:

1—Secure new markets for soybean oil here at home. Many people in the industry have forgotten that soy oil won its present place in our economy during a time when there was a scarcity of other oils with which industry was more familiar. Now that we have a plentiful supply of oils there is a natural tendency by industry to return to the oils it was using before the war.

It is our job to sell vegetable oil users such as manufacturers of margarine and shortening on the fact that there are advantages to be gained by the continued use of soybean oil.

2—We should go after the foreign oil markets. There is a big demand in Europe for oil if only the money exchange can be arranged. We should give what aid we can in arranging that exchange. Certainly we should see that Europeans get the right types of soybean oil for their needs and that they understand how to use U. S. soybean oil to best advantage.

3—At the same time we should give all aid and encouragement possible to the development of new uses and markets for soy oil so there will be a call for the excess.

4—The mixed feed industry is taking large quantities of soybean oil meal and promises to use even more in the future. But the market for meal will be on a much sounder base if new large volume uses are found. Time and energy should be expended toward that end.

5—We should be in Europe now pointing out how soy flour can fill the people's protein needs, which are very great. We should make sure that they obtain the right kind of soy flour to fill these needs, and

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WIDE-ADJUSTABLE front axle, dual or single front wheels available.

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Processor C. M. Gregory of Dike, Iowa, signs first contract with ASA.

that they know the proper way to handle it.

6—A long time educational program should be started to sell food processors and consumers on the value of soy as an ingredient in commercial food products and to convince consumers that they should call for food containing soy products at the grocery counter.

7—The industry should be in a position to present a united front at Washington on matters affecting soybeans. Whether we like it or not many decisions vitally affecting our interests will continue to be made there.

At the time of going to press the following processors had agreed with Strayer that we have mutual problems that can only be solved by joint effort of producers and processors through the Association:

Farmers Cooperative Co., C. M. Gregory, Dike; E. E. Frith Co., E. M. Wiecher, Dubuque; Central Iowa Bean Mill, Paul H. Klinefelter, Gladbrook; North Iowa Cooperative Processing Association, Glenn Pogeler, Manly; Farmers Cooperative Elevator, Henry B. Lovig, Martelle.

Roach Soybean Mill. John P. Roach, Plainfield; Simonsen Mill-Rendering Plant. D. W. Simonsen, Quimby; Farmers Cooperative Association, Karl Nolin, Ralston; Iowa Soya Co., Inc., H. R. Straight, Redfield; Williams Milling Co., Leo W. Williams, Sac City.

Big 4 Cooperative Processing Association, Charles W. Hanson, Sheldon; Hawkeye Soy Products Co., L. R. McKee, Muscatine; Sioux Soya Co., Henry Sherman, Sioux City; Eastern Iowa Milling Co., G. A. Ward, New Hampton; West Bend Elevator Co., R. W. Jurgens, West Bend; Marshall Mills, Inc., J. I. Johnson, Marshalltown; and Fayette Soybean Mill, L. A. Rose, Fayette.

LEADERS IN WASHINGTON

Three members of the American Soybean Association spent most of the first week in January in Washington conferring with government officials, members of Congress and others on matters affecting soybeans.

Those who went to Washington were President John W. Evans, Secretary-Treasurer Geo. M. Straver and Ersel Walley, former ASA president and member of the legislative committee.

Jan. 4 was spent with Secretary of Agriculture Charles Brannan and with PMA grain branch and ECA officials. Subjects under discussion included U. S. off-grade soybeans being dumped in Europe, exports of soy products including soy flour, and the possibility of controls on the 1950 crop.

On Jan. 5 the ASA officials met with representatives of the National Cotton Council for a discussion of margarine legislation.

—s b d—

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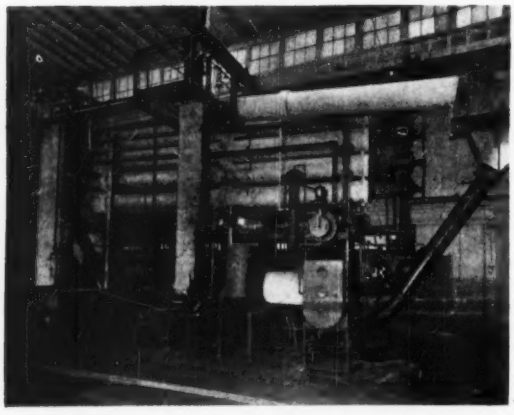

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61.8 BUSHELS! - - ALL-TIME YIELD RECORD

George Shell, Madison County, Ind., farmer, broke all previous yield contest records with a yield of 61.8 bushels per acre in the 1949 Indiana contest.

Shell grew Lincolns and hung up the above record on his best 2 acres. The Indiana contest is conducted by the Indiana Corn Growers Association. Results were announced by K. E. Beeson, Association secretary.

The Madison County farmer first broke into the championship class in 1946 with a yield of 55 bushels. He won state honors again in 1948 with a yield of 56 bushels. In each of the 3 years he has won he has set a new yield record for the state contest.

Because of his three victories Shell becomes permanent possessor of the Roy Caldwell challenge trophy.

Shell's excellent farming methods and superior soil fertility practices along with the use of the high yielding Lincoln variety are given credit for the sensational yields. His rotation is corn, soybeans, wheat and mammoth clover.

For his 20 acre 1949 championship field he plowed down manure and then used 200 pounds of 0-12-12 fertilizer in the row. He drilled about 3 pecks of seed per acre in rows averaging 37 inches after very thorough seed bed preparation. He cultipacked the early growing crop two times and followed with three cultivations.

In his characteristic thorough-going fashion he made sure of no weed competition by giving the field a hand hoeing. Except for this one reversion to the practice of his grandfather's day, he simply followed excellent farming practices as did most of the high yielding contestants.

Second place honors went to Charles M. Maddox of Benton County with a yield of 55.9 bushels per acre. He planted Hawkeyes in 40-inch rows and in a 5 year rotation of corn, corn, soybeans, wheat and clover.

Allan Anson of Huntington County, third place winner with 55.5 bushels per acre has consistently grown high yields in the state contest, having previously checked three times with yields in excess of 45 bushels.

Others ranking high in the state contest with very high yields, include Cyril Gard of Vigo County with a yield of 54.9 bushels; Harry Moser, Montgomery County with 52.7 bushels; O. L. Bryant, Allen County with 51.8 bushels; Eugene Gwaltney, Delaware County with 51.4 bushels and Maurice Woodward of Hancock County with 51 bushels per acre.

Average yield of the 128 farmers in 28 counties who checked in the contest was 40.3 bushels. State average for 1949 was 22.5 bushels.

BEAN MEETING IN ALA.

With large chunks of land going out of both peanuts and cotton because of allotments this coming year, farmers in the Deep South are on the prowl for a new crop.

They want a cash crop that is mechanized and an oil crop if possible, one they can find a ready market for at the local oil mill.

Soybeans seem the best bet. They are already being grown profitably in limited areas in Alabama and Florida, and oil mills have pushed their experimental planting elsewhere in Alabama and Georgia.

Dothan Oil Mill Co. held the first of a series of soybean meetings at Dothan, Ala., Dec. 21. The Dothan recreation center was filled to overflowing for the occasion with farmers from an extensive area.

Speaker was L. Irwin, Foley, Ala., farmer who grows soybeans extensively in Baldwin County. Irwin said soybeans are the "easiest crop that can be grown." He grew soybeans on 200 acres in 1949 and averaged 35 bushels per acre. He grossed $1.90 per bushel and figured production costs at $10 per acre.

Present at the meeting also were J. N. Bryson, president of Dothan Oil Mills; J. D. Warner, Northwest Florida Experiment Station, Quincy, Fla.; and L. M. Humphrey, chief

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A money saving unit designed for use in the Soybean Industry.

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All "Cedar Rapids" Scalping shoes are equipped with Barnard & Leas positive throw heavy duty self-aligning roller bearing eccentrics.

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Complete Storage Installations

Revolutionary Air-Cell Stave Construction

Handling Equipment Engineered for your Needs

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- **Air-Cell Staves Mean Weather-Proof Protection**
  Hollow-wall construction of tanks permits better control over heat, cold and moisture . . . gives you locked-in air insulation equal to 15" concrete thickness.
- **Air-Cell Staves Mean Greater Structural Strength**
  Truss-like design plus all-around tamping of staves make tanks 2 to 3 times stronger than most bins.
- **Complete Storage Systems or Annex Tanks Quickly Erected**
  Saves you construction worries . . . expertly trained crews handle complete installation. Our engineering staff helps you plan without charge.

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of the plant breeding staff of Dortch Seed Farms, Burdette, Ark.

The Dothan mill has been encouraging trial plantings by farmers in its territory in recent years. Some of the farmers plan considerable expansion in acreage in 1950.

WINNER AT INTERNATIONAL

Paul K. Johnson, Ladoga, Ind., won the soybean championship at the International Grain and Hay Show held in Chicago Nov. 26-Dec. 3.

Johnson received the trophy offered by Union Stock Yard and Transit Co. It becomes his permanent property if he wins it twice more.

Reserve champion was William R. Beattie, Staples, Ontario, Canada. Beattie won the championship last year.

Regional winners were:

Yellow soybeans, regions 1 and 2—William R. Beattie, Staples, Ontario, Canada.

Regions 3 and 7—Paul K. Johnson, Ladoga, Ind.

Regions 4 and 8—Hirsch Brothers, Oreana, Ill.

Other soybeans, regions 1 and 2—William R. Beattie, Staples, Ontario, Canada.

Regions 4 and 8—W. F. Swearington, Heyworth, Ill.

Regions 3 and 7—Elmo Patterson, Coshocton, Ohio.

Johnson, who raises Indiana certified Lincoln and Hawkeye soybeans for seed, has shown soybeans for the past 4 years. He won the Pillsbury award for soybeans at the Indiana Corn and Small Grain show in 1948. This was his first year at the International.

The championship sample was of the Lincoln variety and was from a 20-acre field. The field yielded 37 bushels per acre.

PAUL K. JOHNSON

Johnson farms 358 acres with corn, wheat, soybeans and alfalfa the major crops. All the grain not sold for seed is fed to purebred Polled Shorthorn cattle and Duroc hogs.

He has been raising soybeans for about 18 years, and started out with the Manchu variety.

SEED WILL BE PLENTIFUL

Plenty of high quality soybean seed is on hand for planting in Iowa next spring, according to C. R. Weber, Iowa Experiment Station agronomist at Iowa State College.

In contrast to the year before, hardly any seed of the 1949 crop was damaged. Weber credits better combining conditions and the fact that moisture content of the beans was about right to combine easily and yet not be injured. Harvesting was completed a week to 10 days earlier this year and well ahead of frost so that bean seed in general will germinate well next spring if stored properly this winter.

Yields over the state were better than early anticipations in spite of general drouth conditions.

Contributing factors to both the high yield and easy combining, according to Weber, were absence of weeds and wide acceptance by farmers of the newer high yielding varieties. The soybean crop was relatively weed-free last year. Weber says that this was due primarily to the excellent weather conditions during the early part of the season which made it possible for farmers to get into fields to prepare good seedbeds and take out weeds with spike tooth harrows or weeders.

Lincoln and Hawkeye beans made up the bulk of the acreage. About 75 percent of the Iowa bean acreage was in Lincoln, about 15 percent in Hawkeye and 5 percent planted to other varieties. Weber looks for a considerable increase in Hawkeye acreage next year. Hawkeye is recommended to replace all of the acreage planted to Richland and to supplant some of the Lincoln acreage. Weber says that it will replace Lincoln in the northern section of the state, especially if prospects are for a late year.

Iowa farmers who grew beans say in general that yield of beans this year was relatively higher than yield of corn. Corn was hit by borers, the big October wind storm, and drouth, and the average yield according to the November Crop and Livestock Report was 49 bushels. Farmers figure the yield ratio between the two crops favored soybeans and some expect to grow a few more soybeans next year.

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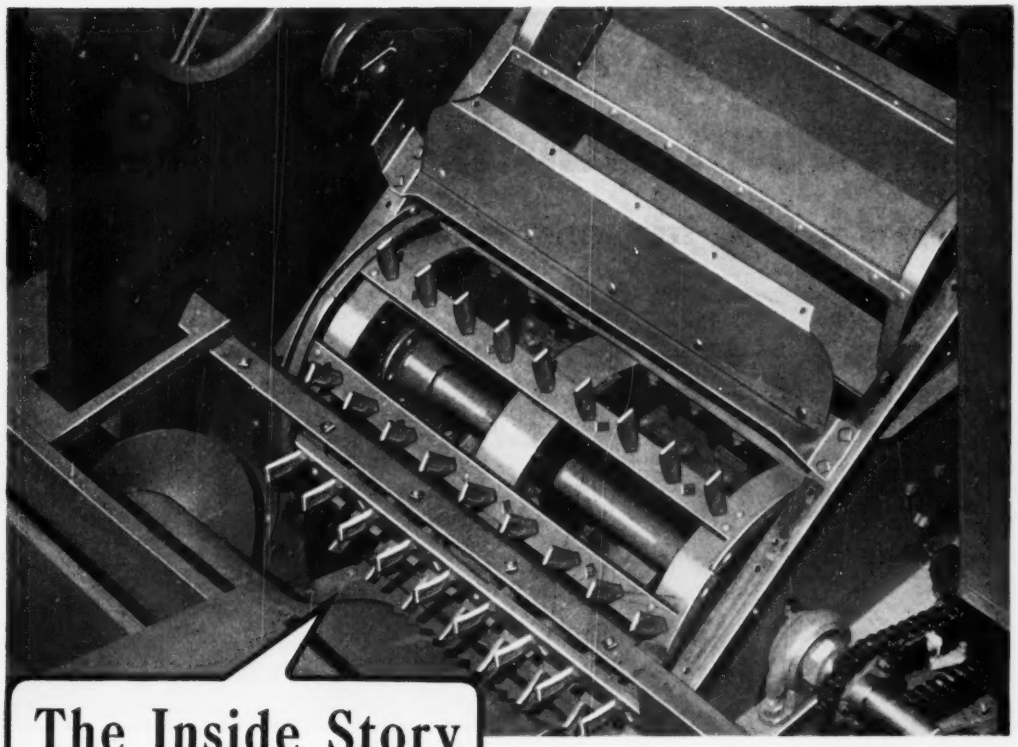

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Soybean stands are often better with Du Pont "Arasan." In Ohio Experiment Station tests "Arasan" seed treatment increased stand 42.8%. In tests on a Virginia farm where low-viability seed was planted, "Arasan" increased stands by 103%.

Better stands make better yields. In seasons when weather is bad for germination, or when seed has low viability, "Arasan" is especially helpful in improving stand and yield.

FOR BEST RESULTS *be sure your soybean seed is treated with "Arasan" before inoculation. You can treat the seed yourself by following directions on the can of "Arasan," or your local seed treater can do it for you. For small grains and cotton, be sure your seed is treated with Du Pont "Ceresan" seed disinfectant. For full details, write to Du Pont, Semesan Section, Wilmington 98, Del.*

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BETTER THINGS FOR BETTER LIVING
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Tune in Du Pont "Cavalcade of America"—Tuesday Nights, NBC Coast to Coast

Jan. 31st Is the Deadline

If you plan to hold your soybeans past Feb. 1 you can protect yourself and put a floor under the price drop you may have to accept by taking advantage of the government price support program.

You can be sure of support price of $2.11 plus a moisture premium up to 6c, storage allowance of 7c, and track loading payment of 2c per bushel if you deliver your soybeans on track at a country point.

You have until Feb. 1 to seal your soybeans in approved bins on your farm or in approved warehouses and obtain a government loan or purchase agreement on them.

Any notes or chattel mortgages, loan agreements or purchase agreements must be signed by the producer and mailed or delivered to the county PMA committee before Feb. 1. This is a month longer than you had last year.

Loan delivery date has also been extended 1 month longer than was true last year. You have until May 31 to deliver your soybeans or pay off the loan.

Soybeans grading No. 4 or better and having a moisture content not over 14 percent are eligible for support.

For further information contact your county PMA committee.

LINCOLN BEST IN INDIANA

Coarse growing varieties like Lincoln and Wabash have a decided yield advantage when grown on "hard run" soils in Indiana, 1-year results on the Swift & Co. soybean test plots at Frankfort, Ind., indicate.

Wabash was out ahead of all other varieties in the Swift tests, with a per-acre yield of 26.6 bushels as compared with 24.8 for Lincoln, the next high. However, Wabash is too late maturing for all except southern Indiana. It is not recommended for the area around Frankfort.

A soybean field day was held at the 15-acre Swift & Co. plots at Frankfort last fall. The event was co-sponsored by Swift & Co., Frankfort Implement and Truck Sales, the Purdue extension service and Purdue University. Results of the tests were compiled after harvest.

Results of the 1-year yield tests on the plots which had been unfertilized for some years:

Variety	Yield Bu. per Acre
Lincoln—Full season variety	24.8
Richland—One week earlier than Lincoln	17.6
Hawkeye—One week earlier than Lincoln, erect, taller than Richland and higher yielding	19.
Adams—Iowa variety, not equal to Lincoln in Indiana; full season variety	23.7
Earlyana—Two weeks earlier than Lincoln	17.
Monroe—New Ohio variety of Earlyana maturity	13.3
Wabash—Late variety for southern Indiana	26.6

Lincoln is still the best variety for Clinton County, according to Purdue extension service. Hawkeye is the best in its maturity group on highly fertile soils or where earlier maturity is desired. Earlyana can be used there for late planting.

In last year's delayed seeding test, Lincoln made 23.2 bushels when planted June 20; Hawkeye 21.3 bushels; and Earlyana 19.9. The latter two varieties yielded slightly more than when planted May 30 and Lincoln slightly less. Drouth may have affected the short season varieties when planted in May. Earlyana appeared best for delayed planting at the time of the field day Sept 20, but the ideal fall permitted the other varieties to finish with high quality grain and good yields. Earlyana finished early enough to permit wheat seeding with little delay after fly-free date.

In the fertilizer test 550 pounds of 0-10-20 plowed down produced 7.9 bushels per acre over unfertilized check plots where no fertilizer was used. Check plots produced 20 bushels per acre. The addition of nitrogen did not increase the yield significantly.

The cost of the phosphate and potash plowed down was $11 and gave a return of $16 increase in soys, and some increase can be expected in ensuing crops.

Application of 100 pounds of 0-10-20 used in the row at planting time gave a 2.2 bushel increase, the usual amount expected. Five hundred pounds of Blenn (phosphate, potash plus minor elements) had the same result.

A heavy fertilizer application should have been plowed down on the field in the spring of 1949, according to the recommendation of the extension service.

In rate of planting tests yield of Lincoln was not increased by drilling more than 1½ bushels seed per acre in solid plantings. But the yield fell when only 1 bushel was used. Results with the Hawkeye were variable. The extension service recommends from 1½ to 2 bushels for solid seeding of either variety.

In rows Lincoln yields practically the same whether seeded at the rate of 3, 4 or 6 pecks. Three pecks of Lincoln seed are usually enough in wide rows.

For Hawkeye, in four out of six comparisons of row seedings, yields were higher when more than 3 pecks were drilled in 40 or 36-inch rows. In low fertility soils the shorter growing Hawkeye should be planted in narrower rows than Lincoln. Indiana extension service recommends a rate of planting of at least 3 pecks in 40-inch rows; 4 pecks in 30 to 36-inch rows and 5 pecks in 20 to 30 inch rows.

There was very little difference in yield between row and solid plantings when the best rate of seeding was used for each variety. This was true of both Lincoln and Hawkeye. Planting in rows is recommended on highly fertile soils and for best weed control.

ROTARY HOE IN MIDSOUTH

The rotary hoe is fast being classified as essential equipment in north Mississippi County, Ark., cotton and soybean production, according to Mid South Cotton News.

County Agent Keith J. Bilbrey reported recently that scores of farmers are giving complete credit for their cotton stands last year to use of the implements.

The rotary hoe is a mobile series of spike-toothed wheels, each about 4 inches from the rest. Made in two and four-row sections, they are easily pulled by almost any kind of tractor. They are used to break a crust of earth into small pieces so that cotton and soybeans can make a good stand. Too, the rotary hoes destroy small grass and weeds.

The implements are popular in spite of the fact they are often used only one time a year, and add to the farmer's already high overhead expenses.

A check of eight Blytheville implement dealers showed that 142 rotary hoes were sold to farmers in the trade territory in 1949.

FARM STORAGE Carries Small Price Risk

Illinois Men Say Soybean Record Remarkable In Face of Lower Farm Price Level

By T. A. HIERONYMOUS and G. L. JORDAN

Reprinted from Illinois Farm Economics

For the next few years the farm storage of soybeans is likely to prove profitable. There are special reasons why the above statement can be made although we should hesitate to make a similar statement with regard to wheat, corn, or oats.

In addition to the 7-cent storage allowance paid to producers for soybeans placed under loan and not redeemed and for soybeans delivered to Commodity Credit Corporation under a purchase agreement, the character of the market for soybeans tends to cause rather large increases in price between harvest time and the following spring or summer. The rise from November to May is likely to be substantial, except in years of severe economic collapse.

Ignoring the war years when price ceilings were in effect, there was a substantial rise in Illinois farm prices of soybeans from October to May every year for 25 years, except in 1948-49. For the period 1925-26 to 1940-41, the average increase in price was almost 39 percent; for 1930-31 to 1940-41, the increase averaged 40 percent and for the period 1935-36 to 1940-41 it averaged 38 percent. For the three years 1946-47 to 1948-49 inclusive, the rise averaged 15 percent. The rises of 28 percent in 1946-47 and 21 percent in 1947-48 were partly offset by a decline of 5 percent in 1948-49.

Considering the fact that prices of farm commodities have been adjusting to a lower level since the inflationary spurt after the war ended, the soybean price record is remarkable.

In recent years there has been a tendency for a large fraction of the seasonal rise to occur by mid-January. This may be a temporary phenomenon. Certainly the February drops of the past 2 years need not be recurring events.

Explanation of Seasonal

The standard explanation of a usual seasonal increase in the price of grains is best illustrated by the concept of a normal carrying charge. Grain is harvested during a short period of the year and consumed at a fairly even rate during all 12 months. Supplies must be carried forward from one harvest to the beginning of the next. Carrying grain forward involves certain costs, generally considered as the cost of storage, insurance, and interest on funds tied up in grain ownership. That is, because of carrying costs, corn is actually worth more in May than in November. For example, if the price of corn in November is $1.25 per bushel and the cost of carrying is 1½ cents per month, then it may be expected that on the average the price of cash corn will advance by 9 cents per bushel between November and May and be worth $1.34 per bushel in the latter month.

The exactness of the seasonal increase is, in individual years, hidden by the larger price changes caused by unusual changes in supply and overall changes in demand such as are reflected in the general price level. The usual seasonal increase resulting from the carrying cost does not occur in all years but tends to exist if we consider the price change over an average of several years. Nor is the carrying cost the same amount in all years. The interest cost varies with the value of the grain; interest cost is higher if corn is worth 2 dollars per bushel than if it is worth 1 dollar. In some years there is an abundance of storage available and the price of storage is low, while in years of large supplies the price of storage may be very high.

One explanation advanced for the unusually large seasonal increase in the price of soybeans has been that soybean storage was inadequate during the fall months and that the price of storage has been high. Soybeans move onto the market at harvest in such large quantities that it is difficult to find storage for them. It is now argued that because soybean processors have been rapidly building additional storage space, the large premiums on soybean storage will disappear and the seasonal increase in the price of soybeans will decline to more ordinary levels.

We do not agree with this standard explanation and expectation of the soybean seasonal. First of all, soybean processors have been able to rent all of the storage they needed for a maximum of 7½ cents per bushel for 6 months. Including interest and insurance the carrying cost has not been more than nine cents. This does not explain the large average seasonal increase.

Processor Practices

Soybean processors, as a group, are willing to pay up to within 30 cents per bushel of as much for soybeans as they can get for the oil and meal made from a bushel of soybeans. In deciding the price they will bid at country points, they take the combined value of 48 pounds of soybean meal, bulk Decatur, Ill., and 9 pounds of soybean oil in tank cars, Midwestern mills, and subtract 30 cents from it. For example, if soybean oil is 15 cents per pound and soybean meal $70 per ton (3½ cents per pound) the combined value is $3.18 per bushel. Up to $2.88 will be bid for soybeans.

The prices of soybeans and soybean products are extremely erratic, changing frequently and by considerable amounts. If a soybean processor were to buy soybeans at one time and sell the products at some later time he might realize the expected 30 cents, or he might realize

less or more than 30 cents. In order that they not be subjected to risks of price change, soybean processors attempt to protect themselves by selling oil and meal for delivery at a later time or by hedging in soybean futures. Soybean processors carry relatively small inventories of soybeans unprotected against price change. They use the sale of oil and meal for deferred delivery, or forward sale, almost exclusively.

Table 1.—Current Month Prices and Prices Actually Received by Processors for Soybean Oil and Meal, 1947-48

	Current month oil price	Actual oil price	Current month meal price	Actual meal price
	Cents per lb.		Dollars per ton	
September (new crop)	19.90	19.52	94.75	86.09
October	20.60	19.08	84.00	80.66
November	25.00	22.62	84.75	81.39
December	26.30	24.09	92.25	86.17
January	26.75	24.37	100.00	93.55
February	20.10	19.11	76.00	75.86
March	21.20	20.03	75.00	76.62
April	24.00	23.34	77.50	77.59
May	26.00	24.72	77.56	77.86
June	27.00	25.14	84.55	85.81
July	22.30	22.13	86.90	86.79
August	21.85	21.83	73.10	73.10
September (old crop)	22.20	22.20	73.70	73.70

Forward sales are made to oil refiners in the case of oil and to feed ingredient wholesalers and feed manufacturers in the case of meal. While oil refiners, feed wholesalers, and feed manufacturers are more willing to assume risks of price change than are soybean processors, they will not carry, without reward, more risks than are necessary. Accordingly, the practice of offering discounts for accepting deferred delivery has arisen.

The distance forward that sales must be made to cover risks is appreciable. Farmers have sold, in the past, a high proportion of their soybeans before and during harvest. In 1947 they had sold 73 percent of the crop by December first and 80 percent by January first. On January 1, 1949, they owned about 25 percent of the 1948 crop. It seems, then, that to get soybeans to crush processors must buy enough soybeans at harvest to keep their plants busy for 9 months. Accordingly, sale contracts call for delivery 1 to 9 months after the sale is made. The average sale must be at least 5 months forward. Some sales, meal in particular, are made for as much as 12 months forward.

The prices on deferred delivery oil and meal are made at lower prices than those made for immediate delivery. Processors are willing to take discounts in order to shift risks and the buyers of oil and meal must be offered discounts to induce them to take additional risks. Buyers of oil and meal cannot shift the risks acquired when they buy forward. The size of the discounts varies with the length of time to delivery, the relative level of prices, and from year to year.

In Table 1 we have shown the prices of oil and meal for immediate delivery and the prices at which 1947 crop oil and meal actually sold from September 1947 to September 1948. The column labeled "Current month oil price" refers to spot prices for the month indicated. The column labeled "Actual oil price" refers to prices actually received by processors for all oil sold during the specified month, including spot sales and forward sales. Weighted by the quantities sold in each month, the average discount on oil was 1.83 cents per pound. The weighted average discount on meal was $4.04 per ton. These discounts amount to 14.64 cents and 9.70 cents per bushel of soybeans or a total of 24.34 cents per bushel. That is, processors had to pay, during 1947-48, an average of 24.34 cents per bushel to get someone else to carry their market risks in soybeans.

In calculating the prices they will bid for farmers' soybeans processors use the discounted prices that they actually receive, thus taking the cost of shifting risks out of the farm price. Interestingly it costs about as much to get someone to carry risks as it does to process soybeans. The data in Table 1 show that the premiums are greatest in the fall months and eventually disappear. They decline as the time to delivery decreases. Accordingly, those farmers who sell soybeans in the fall pay much larger risk premiums than those who sell soybeans in the spring.

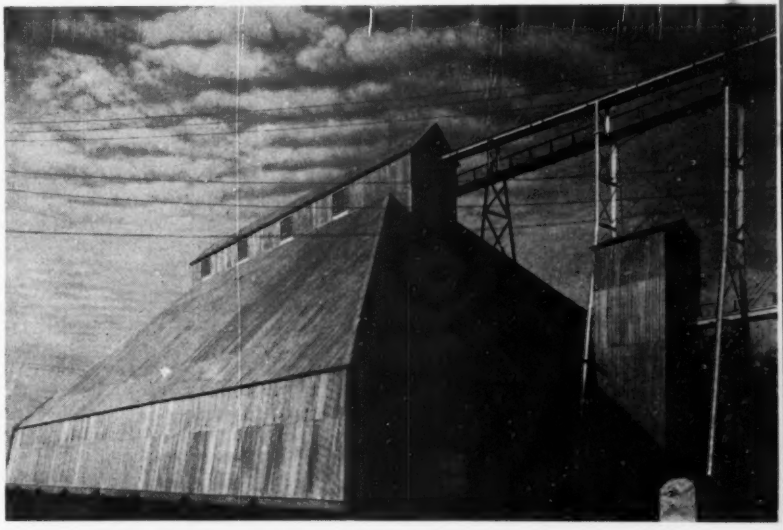
On the basis of this risk shifting system with its discounted prices we suggest that risk premiums explain the unusually large seasonal movement of soybean prices. It arises out of ownership considerations rather than storage factors.

Some Examples

During October 1947, oil sold spot for an average of 20.50 cents per pound and meal for an average of $84 per ton. The combined oil and meal value of a bushel of soybeans was $3.86. During the same month oil for delivery in April sold for 18.25 cents per pound and meal for delivery in April sold for $78 per ton. The combined value for April delivery was $3.54. The premium for carrying the risk from October to April was 32 cents per bushel.

On September 24, 1948, October delivery oil sold for 18 cents and

The Planters Oil Mill, Tunica, Miss., has completed the erection of a new type storage house, having a capacity of 8,000 tons and is 90 by 160 feet. This house is of rigid frame steel construction and free of built-up trusses. It is said to be the first of this type built, and was designed and constructed by the Pidgeon-Thomas Iron Co., Memphis. One of the advantages of this type building is that the seed does not collect in the roof members, according to C. E. White, manager.



February delivery for 15.5 cents. On the same day meal for October delivery sold for $52 and February for $49. The gross values of soybeans were $2.87 and $2.57 respectively. The risk premium was 30 cents per bushel.

On September 29, 1949, October delivery oil sold for 10 cents and February delivery for 9½ cents. On the same day meal for October delivery sold for $64.25 and February delivery for $60.25, the gross values of soybeans were $2.44 and $2.31. The risk premium was 13 cents per bushel.

Soybean inventories must be carried unprotected to realize the risk premiums. In addition to the risk premiums there may be gains from increases in prices or losses from declines in prices, which must be considered in addition to the premium. We noted earlier that the size of the risk premium varies with the relative level of prices. Soybean oil is very low in price and the trade seems to feel there is not much risk of its going lower. This factor explains the relatively small risk premium this year.

Future of Risk Premiums

Two factors will tend to reduce the size of risk premiums below the 1947-48 and 1948-49 levels. First, as prices stabilize and postwar adjustments are completed the ownership of soybean products will tend to be judged less risky. Estimates of risk are made largely on the basis of the level of prices as compared to some past "normal" and on the amount of past fluctuation.

Second, the risk premiums for soybean ownership are much larger than for corn, oats, and wheat because the number of persons eligible for risk assumption is much more limited. There are no satisfactory hedging markets for soybeans, soybean oil, and soybean meal but the soybean futures market is improving rapidly. As hedging facilities continue to improve the risk premium will decline. It may be expected that the decline will be gradual and not very rapid.

Possible Collapse

For most grains the average seasonal variation is small when compared with the price movements caused by changes in domestic or foreign demand and supply factors. Soybean prices are also greatly affected by actual or anticipated changes in demand and the May to September prices are also affected by prospective changes in supplies of soybeans and competing products. By October the supplies of beans and competing products are fairly accurately predicted by government agencies so the dominant price-making forces are changes in demand and the harvest-time discounts resulting from the methods processors use to shift risks.

Although the recent devaluation of European currencies tends to depress world prices of fats and oils and the low corn prices resulting from a bumper crop tend to depress soybean meal prices, any resulting price weakness should show up soon. This would still permit a seasonal rise in price. If a continuation of the deflation of prices of farm products occurs the November to May rise would be reduced or eliminated.

Government officials suggest that we shall have large supplies of fats and oil for export but that there is a need for these supplies. As the authors see the picture, the farmer is likely to be well paid for holding his beans until January or later at least four times out of five for several years to come.

If the market price is below the loan price at harvest time the farmer can get a government loan and storage free. If the market price is above the loan price the forces that have tended to cause such wide seasonal price rises in the past are likely to be effective although probably on a slightly diminishing scale.

A COMBINE HARVESTER FOR PEANUTS

The new peanut combine perfected in Georgia.

The successful development of a peanut combine harvester that may open a new era in peanut production has been announced by Director George H. King of the Coastal Plains Experiment Station, Tifton, Ga.

Present common harvesting practice entails a considerable amount of hand labor in digging, shaking, stacking and picking after several weeks of drying in the small stacks at the mercy of the weather.

The new harvesting procedure will place the peanut in the class of fully mechanized agricultural crops, and it may mean greater prominence for the "lowly goober," according to Director King.

The machine was designed and constructed by Agricultural Engineers J. L. Shepherd and W. D. Kenney of that station. It is expected that it will be manufactured by one or more of the present builders of peanut pickers and equipment.

The tractor-drawn combine unit covering two rows simultaneously takes the whole plants from the soil, separates the peanuts from the vines, bags the peanuts, and returns the vine residue to the soil where it may be harvested as livestock feed or it may be left as an excellent soil humus. Under normal conditions the machine will harvest at least 1 acre of peanuts per hour and will require only two men for operation.

Why . . .

SOYBEANS ARE WORTH MORE

From statement of the ASA Secretary-treasurer before U. S. Senate sub committee on agriculture and forestry

By GEO. M. STRAYER

SOYBEANS ARE a unique crop in several respects. In a short period of years they have jumped from obscurity to the point where they are the second most important cash grain crop in the great Midwest area.

Much of the current acreage of soybeans—and the United States produced 220 million bushels of this crop in 1948—has come into being during the past 2 decades. Acreage and per acre production have both risen steadily since 1930, and in many of those years it appeared that we were going to have more soybeans than could possibly be utilized to advantage. Yet, in every case, some type of demand materialized and before the new crop matured a major portion of the old crop had been put to use.

Up to date soybeans are not, then, a crop which has a history of surpluses which have been bothersome. Instead, increased utilization has followed increased soybean production.

Historically, however, the price of soybeans in the United States has been low—too low—because we did not have adequate means of utilizing their *full* value.

Why Priced Low?

The price of soybeans has consistently been too low because the high value of the soybean meal as a protein feed had not been established. We had no historical background—no experience—upon which to base values. It was not until the war years that we began to truly appreciate the value of soybean oil meal.

The price of soybeans has been too low because we needed more research and facilities to properly process and establish the uses for soybean oil; because the prejudices built up during past generations of consumption of other edible fats had to be overcome; and because soybean oil competed unduly with cheap imported oils brought in this country at prices far below the cost of similar products produced in the U. S.

Then came Pearl Harbor, and our supply of vegetable oils from other parts of the world was cut off. We were put in a position of replacing about two-fifths of our oils—the imported portion—and doing it immediately. We turned to increased acreages of soybeans. Farmers were asked to double the acreage in 1942 and again in 1943. The use of soybean oil in anything other than foods was practically prohibited as a war measure. All during these years about 97 percent of the total amount of soybean oil produced by our farmers was consumed in food products.

At the same time those economical livestock production practices which become so necessary in a wartime economy demanded that we feed greater amounts of protein to greater numbers of livestock than ever before in our history. The livestock program which supplied our nation, our armies and our allies with milk, meat, and eggs was made possible only by the increased production of soybean oil meal which became available during that period. During that period real progress was made in utilizing all soybean products in those fields where their greatest contributions lay. But all during that period the established price for soybeans was based upon a price historically too low.

GEO. M. STRAYER

40% of U. S. Protein

Nevertheless, today, soybeans produce 40 percent of all the protein feed—animal and vegetable—which is used in our livestock feeding programs, including swine, poultry, beef, mutton and dairy production.

Soybean oil today accounts for about 20 percent—one-fifth—of all the edible fats and oils produced within the United States. Today one half of all the vegetable shortening produced in our nation is made from soybean oil, and nearly 40 percent of all the margarine produced in the United States is made from soybean oil. Soybeans, directly or indirectly, have become a major and essential part of our food program.

But as we look ahead we can not ignore the increased food demands of the increased population of our nation. Between 1938 and 1948 the population increase of the United States was greater in numbers than was the total population of Canada at the start of that period. Those mouths must be fed. Our international obligations require continued enormous exports of edible protein and fats to correct malnutrition abroad. We are committed to a policy which in our best self interest demands continued supplies of both commodities.

We are considering in this country

a program of grassland and livestock farming in order to more nearly balance our domestic agricultural economy and at the same time build and conserve our soil resources. Such a program requires sustained large supplies of protein feeds for economical production. With the total of other protein supplies destined to head downward, and with the average protein content of the corn crop of our nation several points below levels of 15 years ago, soybeans would seem to be the logical source of protein for our postwar agricultural economy. Soybeans can be, and often are, an integral part of a sound soil-building and conservation program, and as such they have become an essential part of our grain and livestock economies.

As soybeans come from the harvester they contain from 30 to 35 percent of edible and highly nutritious protein—more than the conventional dairy feed supplement. Each bushel also contains from 8 to 10 pounds of edible oil—golden in color and rich in food value. Thus an acre of soybeans will produce, on the same acre of ground, large quantities of both of the two scarcest food commodities in the world today.

Valuable Products

A bushel of soybeans contains about three times as much protein, 10 times as much fat, and nearly three times as much valuable minerals as a bushel of wheat. That same bushel of beans contains four times as much fat, four times as much protein and nearly four times as much valuable minerals as a bushel of corn.

The soybean end products—soybean meal and soybean oil—are converted into hundreds of valuable food, industrial and medicinal uses. Almost daily science discovers new values in and applications for the crop. Based on the actual food value contained, soybeans are worth more money than they now bring.

In our nation we have come to accept what we call agricultural surpluses as inevitable. In doing so we assume that all people are well fed —that they have no nutritional needs. That is a fallacious assumption. We have not begun to meet the protein and the fat needs of our own people. We have supplied them with carbohydrates, perhaps, but we have not supplied those nutritional factors which are conducive to sustained and productive work.

At the same time we are faced with a problem in world feeding which demands huge supplies of proteins if we are to rehabilitate the peoples of Germany, Japan, and our allied countries. Our national economy demands that we rehabilitate those people just as economically, yet as adequately as possible. We can neither afford nor begin to supply porkchops and beefsteak to feed those people. We could not stand the cost; they could not stand the cost.

In the main we must supply alternative products. Soybean protein and soybean oil are the logical commodities. In sending soybean products we will not be short-changing our own people nor taking from them the commodities which they like and can afford. We will be supplying from our own economy a commodity which from the standpoint of price, supply and inherent nutritional qualities is unexcelled.

Approximately one-half of the returns from the sale of soybeans come from the sale of the oil. During the past decade, because of the increased production of soybeans, the United States has changed from a program in which we imported about two-fifths of our fats and oils to a program of self-sufficiency.

Fats and oils touch more segments of agriculture than any other one commodity. The cottonseed producer, the peanut producer, the hog producer and thus the corn grower, the dairyman, the beef producer—all of them have a direct interest. For that reason soybeans have become, during the past decade, a balance-wheel in American agriculture. Increases or decreases in soybean production directly affect every other source of oil or fat, and every other source of proteins. Through this increased production of soybeans coupled with wartime price controls, American soybean oil has become the cheapest edible oil in the world today.

Within the last 16 months the price of soybean oil has dropped from 23 cents or 24 cents a pound to 8 cents and 9 cents a pound. In other words it brings less than half as much as it did 16 months ago. This automatically makes beans bring more than $1.00 a bushel less money.

Heavy Blow

No other segment of our economy has, within such a short period, taken such a severe blow as have the producers of fats and oils. As the older soybean grower experiences this drop in price, he is of course immediately reminded of the depression days of 1932 and 1933 when soybean oil sold at less than 3 cents a pound, loaded in tank cars at Midwest mills. He knows, also what the problem at that time was and has during peace time, continued to be, aggravated by the competition of imported oils and fats, produced under conditions with which the American farmers cannot successfully compete.

We are now faced with a basic decision. Are we going to maintain in this country this agricultural industry which has supplied a good portion of our fats and our protein, or are we going to allow this 700-million-dollar agricultural industry to deteriorate and crumble away?

The problem is apparently one of equitable distribution within our nation and to those sections of the world where the two commodities offered by the soybean crop are most needed. It is our suggestion that the possibilities be explored of wider distribution of soybeans and soybean products as a means of maintaining an essential agricultural industry in this nation, providing a crop which can act as a balancing factor in our agricultural economy during the next decade of adjustment, and raising the levels of human nutrition among our own people and those of the other sections of the world in which we have an interest.

It is our conclusion that proper utilization and distribution of edible oils and proteins can do more than any other single factor to stabilize our domestic agricultural economy and at the same time make our greatest contribution to world peace.

CONFERENCE AT PEORIA JANUARY 16-17

A number of well known soybean authorities in industry and government will appear on the program of the 2-day soybean conference at the Northern Regional Research Laboratory at Peoria, Ill., Jan. 16 and 17, Director R. T. Milner has announced.

The meeting is slanted for soybean processors. R. G. Houghtlin, president of the National Soybean Processors Association, Chicago, Ill., will be chairman of the first day's program, Milner of the second.

The complete program:

JANUARY 16

9:30 a. m.—Announcements and introductory remarks, Milner.

9:45 a. m.—"Development of New Varieties of Soybeans," J. L. Cartter, director U. S. Regional Soybean Laboratory.

10:30 a. m.—"Soybean Industry in Europe," Geo. M. Strayer, secretary-treasurer, American Soybean Association.

11:15 a. m.—"Hedging Problems of Soybean Processors," C. E. Robinson, futures trading analyst, Commodity Exchange Authority.

2:15 p. m.—"Factors Affecting the Choice of a Method for Processing Soybeans," W. H. Goss, associate director, department of scientific research and technical development, Pillsbury Mills, Inc.

3:00 p. m.—"Importance of the Quality of Soybean Oil Meal in Present-Day Feed Formulation," by R. C. Holder, director nutritional department, Central Soya Co., Inc.

4:00 p. m.—"Problems in the Production and Use of Soy Flour," R. G. Brierley, vice chairman, Soya Food Research Council.

JANUARY 17

9:30 a. m.—"Lime as a Hardening Agent in Soybean Oil Paints," A. J. Lewis, chemist, industrial oil section, oil and protein division, Northern Regional Research Laboratory.

9:50 a. m.—"Conducting a Taste Panel for the Evaluation of Edible Oils," Helen Mosher, food technologist, oil and protein division, NRRL.

10:15 a. m.—"Effect of Metals on the Quality of Edible Oil," C. D. Evans, in charge, edible oil section, oil and protein division, NRRL.

11:00 a. m.—"Cotton Acreage Allotment and Marketing Quota Program and Its Effect on the Production of Cottonseed," J. H. Dean, assistant director, cotton branch, Production and Marketing Administration.

11:30 a. m.—"Acreage Allotments for Soybeans and Other Oil Crops," Martin Sorkin, peanut and oilseeds programs division, fats and oils branch, Production and Marketing Administration.

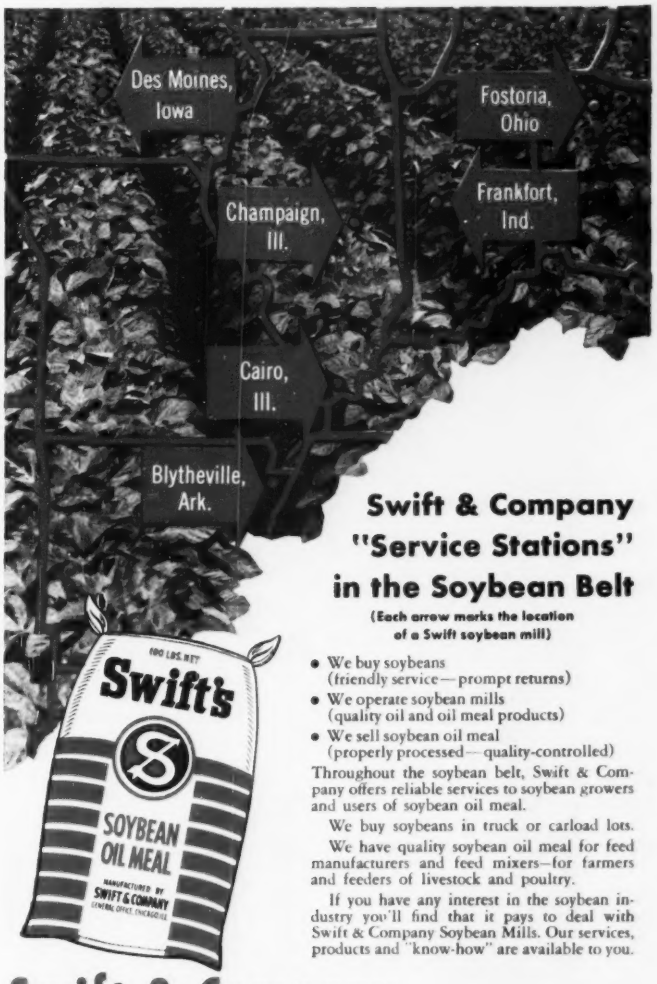
12:00 noon—General discussion and summary of meeting, Milner.

NEW ADM PLANT

T. L. Daniels, president of Archer-Daniels-Midland Co., Minneapolis, has announced that Mankato, Minn., has been selected as the site for a new 3-million-bushel soybean plant.

The plant, Daniels said, is expected to be ready next October, in time for the 1950 crop of soybeans.

Plans call for a 150-foot high grain elevator, a processing structure three stories high and a five-story solvent plant.



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- We operate soybean mills (quality oil and oil meal products)
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We buy soybeans in truck or carload lots.

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Swift & Company Soybean Mills

at

- Cairo, Ill.
- Des Moines, Iowa
- Fostoria, Ohio
- Frankfort, Ind.
- Champaign, Ill.
- Blytheville, Ark.

Fifty trucks were in this line waiting to be unloaded at the Swift & Co. mill at Champaign, Ill., in late September.

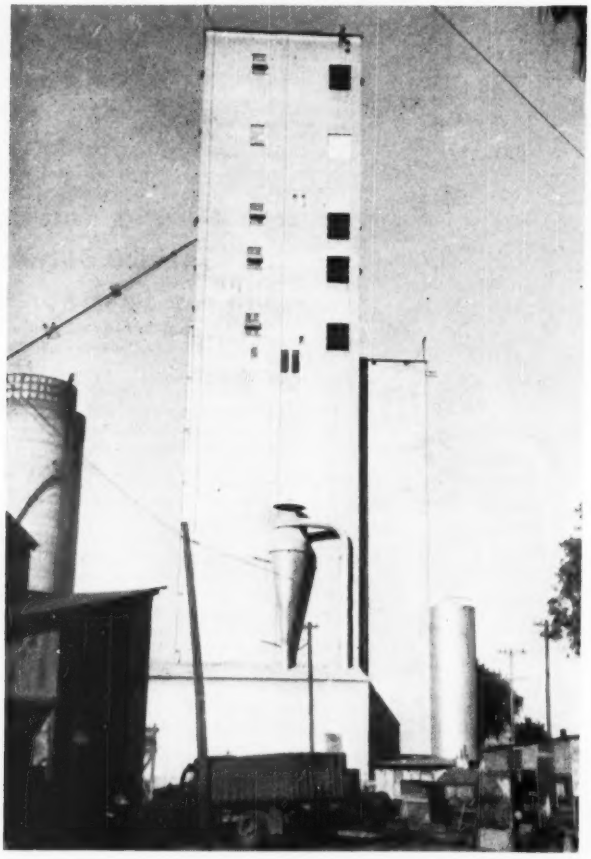
GRAND PRAIRIE - - SOYBEAN CENTER

Reprinted from Champaign County (Ill). Soybean News. Photos are by courtesy of that publication.

THE SOYBEAN is only exceeded by King Corn as a cash money crop on the Grand Prairie that covers most of east central Illinois. This has been the situation for a number of years. As horses began to go out of style about a quarter of a century ago, farmers gradually switched from oats to soybeans. They soon found that the fertile, level, black prairie soil of the Grand Prairie was a natural for this new crop. This area is now generally recognized as a soybean center of the world.

The College of Agriculture, University of Illinois, through the research and extension departments lent assistance of inestimable value toward the promotion of this new crop. Such names as Dr. W. L. Burlison, Dr. C. M. Woodworth, Professor J. C. Hackleman, and Dr. A. L. Whiting of the Urbana Laboratories as well as many others will go down in history as enthusiastic proponents of this relatively new crop.

Even though these intensely worthwhile contributions of the agricultural scientists were made, their contributions would have come to naught if it had not been for the



One of the "country skyscrapers" common in Illinois bean country. They are often open far into the night when soybean harvest is on.

An Account of the Nation's Leading Soybean Center in East Central Illinois

actual cooperating farmers. Several of these leading pioneer farmers lived in Champaign County in the vicinity of Tolono. The names of Will Riegel, John T. Smith, and Dick Lewis stand out among these early cooperating farmers.

These men tried out the varieties. They experimented with the best methods of cultivation, harvesting, and they sought markets for this crop. In fact about anything that had to do with soybeans, these pioneers and others eagerly ferreted out facts.

Varieties have come and gone. Cultural methods have changed. Yields have increased. Giant industries have been built around the bean. Soy oil, soybean oil meal, soy paint and scores of other soybean products are standard merchandise today and many soybean products are on the market everywhere.

The Grand Prairie Country from the beginning took the lead in bean production. It has kept the lead over a quarter of a century. Farmers in this area quickly learned to grow the crop and grow it well. It afforded both the tenant and the landlord, frequently an absentee landlord, another substantial cash crop.

Champaign County holds the distinction of producing more soybeans annually than any county in the United States. Last year (1948), the county produced nearly 3,250,000 bushels of beans. The 1949 acreage was down somewhat from that of a year ago, but the yield was up. Local elevator operators are of the opinion that the total county yield will exceed that of last year.

Soybeans have a great hold on the country of the Grand Prairie. The rotation is too frequently corn and soybeans. Views are common where corn and/or soybean fields reach to the horizons or as far as the eye can see. Conservationists, leading farmers, and even the farm adviser, sometimes shake their heads and wonder where this kind of row crop farming will lead the farmers who live on this black prairie land.

"See that forty down the road," said one of the older farmers to your adviser the other day. "To my knowledge, that forty has grown a row crop every year for the last sixty years. Last year it produced seventy bushels of corn to the acre." That has been the story of the good black earth but hard farming is beginning to tell on much of it.

Agricultural scientists constantly have striven for improved and higher yielding varieties. Farmers are quick to adopt them. The Hawkeye, planted for the first time in 1949, stood well and yielded a large crop of beautiful beans with a high oil content. The Lincoln bean developed by Dr. Woodworth and his associates a few years ago at the Illinois experiment station is another excellent bean that continues to be grown in large quantities. Thirty bushel yields were very common last year. Thirty-five bushels per acre were not at all uncommon. Occasionally a forty bushels per acre yield has been achieved and in some instances even higher yields have been reported.

But what about the future? The 1949 bean harvest is over. There has been a great out pouring of new wealth. Thirty to thirty-five bushels of soybeans to the acre over a one hundred and sometimes more acres per field "ain't just hay." On the other hand a few cents over 2 dollars per bushels on a big yield means a substantial profit per acre. Planning next year's program is just ahead. Will this huge crop of 1949 and the price received for the crop encourage farmers to further increase their acreage? The average farm price of soybeans in August was $2.60. This figure compares with $2.12 at the end of the war and $.95 for the five-year prewar average.

The new addition to the already huge Swift and Co. mill in Champaign affords farmers, through their local elevators, a market close at hand for all the beans feasible for them to produce. This big plant has more than one and one-half million bushels capacity. "We hope to run 24 hours per day and 365 days during the next year," said N. P. Noble, manager of the plant. Continuing, he said, "We have faith as indicated by our recent substantial

The cash grain area around Champaign is full of big combines at harvest time.

outlay of capital, that the farmers in this territory will continue to produce huge quantities of soybeans."

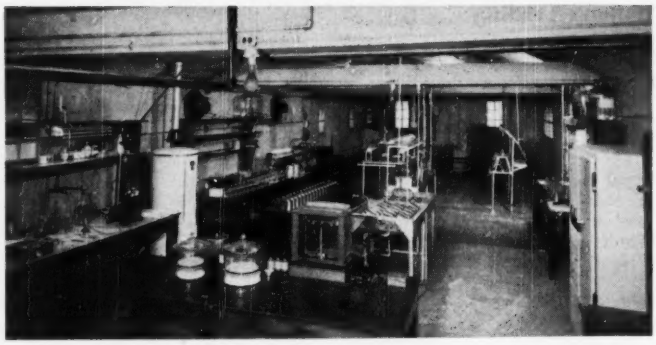
Apparently that faith is justified for the reporter looked out of the Swift office windows while talking to Mr. Noble and he counted more than 50 big trailer, semi-trailer, and other types of trucks filled with soybeans. Perhaps there were about 20,000 bushels on the trucks. They lined the driveway for a quarter of a mile waiting to be unloaded. Local elevators were jammed with beans during the peak of the season. Railroad cars were difficult to obtain. Thus, this huge line at the Swift plant was accounted for by the fact that the country elevators were transporting beans to the processing plant by means of trucks. In addition great quantities of soybeans were reaching the processing plant by way of the railroad. As many as 65,000 bushels of soybeans were handled in the Champaign plant.

Big business — that is what the soybean business is in the black prairie country. The farmers have a big stake in this business.

Looming surpluses on many crops foreshadow government controls. These surpluses in corn and probably soys will sooner or later bring many displaced acres. What will be done with them? A reversion to grass, clovers and alfalfa may take place. Perhaps the future will bring an improved rotation, and better land use.

At the same time the Grand Prairie country will probably continue to abundantly produce large crops of corn and soybeans. These crops are "naturals" for the Black Prairie country.

New Woodson-Tenent Laboratories



You see view of the general laboratories of Woodson-Tenent Laboratories at Des Moines, Iowa, showing refining and protein equipment. The extraction department not shown in picture has a capacity of 200 fat determinations daily.

APPEAL FOR HELP FOR SOY FLOUR INVENTOR

An appeal for aid for Dr. Ladislaus Berczeller, noted Hungarian scientist who pioneered the development of soy flour, comes to the office of the American Soybean Association from the American Friends Service Committee.

Dr. Berczeller is in ill health and confined to his bed in a Paris hospital where he is dependent on relief funds for his welfare. Since there are huge numbers of refugees in France public funds are not available to maintain him on more than a bare subsistence level.

It is ironic that the man who invented soy flour that now plays so large a part in the relief of want should now himself be in want, it is pointed out. Dr. Berczeller became a refugee in France during the war. It seems unlikely that his health will ever be such that he can get back on his feet or do scientific research again, according to reports reaching the American Soybean Association.

In the past some individuals and firms in the U. S. sent substantial contributions to Dr. Berczeller and these were of real help to him. But these funds have long since been exhausted. So once again comes an appeal from the American Friends Service Committee for help "for a distinguished scientist."

Your contribution should be sent to American Friends Service Committee, 20 S. 12th St., Philadelphia 7, Pa.

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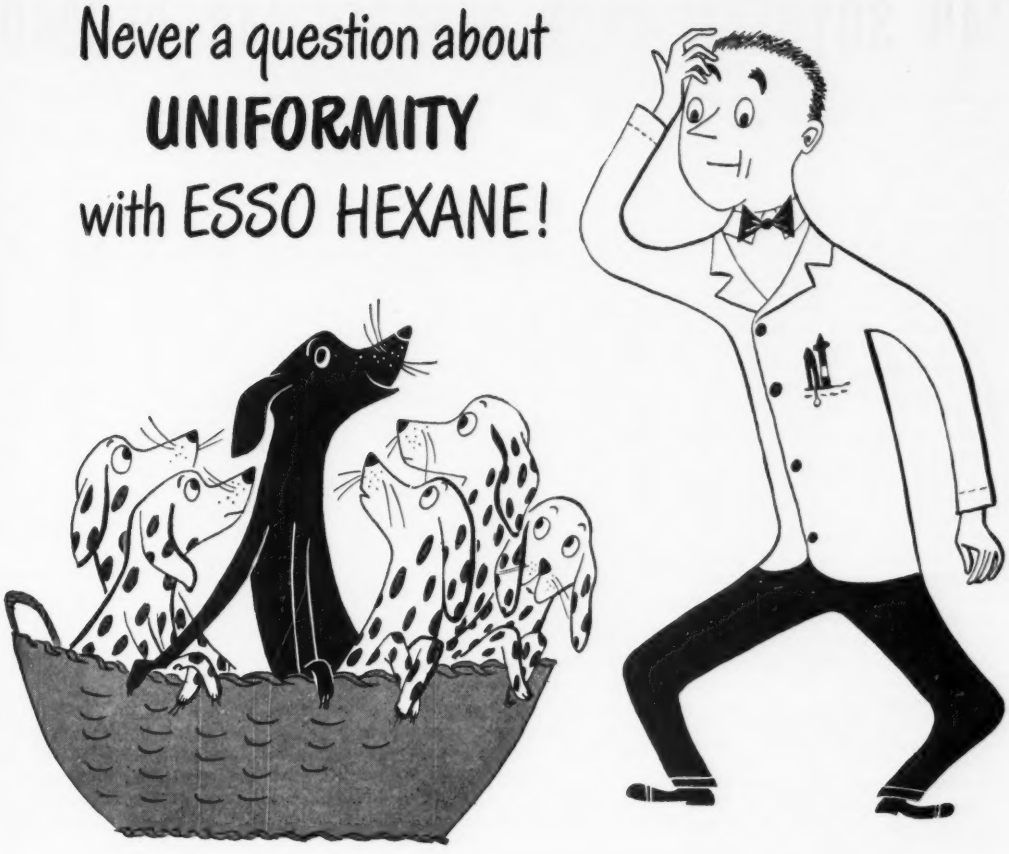

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If you have a solvents problem or want further information on the specifications and characteristics of Esso Hexane — write or call our office nearest you. Our technicians will be glad to assist you.

'49 SOYBEAN CROP PRESSES '48 RECORD

Production of soybeans in 1949 is estimated at 222 million bushels, states the U. S. Department of Agriculture in its final 1949 crop report issued Dec. 19.

This is only slightly smaller than last year's record crop of 223 million bushels, but is 50 percent larger than the 1938-47 average of 148 million bushels. The large crop is a result of unusually high yields in most of the heavy producing states. The United States yield of 22.4 bushels per acre is a record high.

It exceeds last year's yield by a bushel per acre. The 10-year average yield is only 18.7 bushels.

The 12 million acres of soybeans planted for all purposes this year are about 1½ million less than were planted in 1948. Both the acres planted alone and the acres interplanted with other crops were below last year. The "alone" acreage this year is at the lowest level since 1941 while the interplanted acreage is less than any year since 1935. About 82 percent of the total acreage was harvested for beans, slightly less than the 83 percent harvested last year.

The 1949 season for soybeans started and finished under almost ideal conditions. The crop was planted at about the optimum planting time and earlier than last year. Progress was rapid during the season and the maturity date was as much as two weeks early in the heavy producing North Central states. Harvesting started early in September and was nearly completed by Nov. 1.

SOYBEANS FOR BEANS

State	Acreage harvested ‡			Yield per acre			Production		
	Average 1938-47	1948	1949	Average 1938-47	1948	1949	Average 1938-47	1948	1949
	Thousand acres			Bushels			Thousand bushels		
N. Y.	10	5	5	14.8	16.0	18.0	156	80	90
N. J.	10	11	12	15.5	16.5	16.5	147	182	198
Pa.	22	16	16	15.4	16.0	17.0	334	256	272
Ohio	844	908	858	19.4	20.5	24.0	16,276	18,614	20,592
Ind.	1,128	1,459	1,442	18.2	22.0	23.0	20,686	32,098	33,166
Ill.	2,852	3,354	3,177	21.2	24.0	26.0	59,831	80,496	82,602
Mich.	91	65	66	16.2	17.5	22.0	1,464	1,138	1,452
Wis.	34	15	15	14.5	13.0	16.5	479	195	248
Minn.	293	844	709	15.0	18.5	17.5	4,452	15,614	12,408
Iowa	1,345	1,564	1,279	19.5	22.5	22.5	25,894	35,190	28,778
Mo.	434	795	857	14.4	20.0	21.0	6,534	15,900	17,997
N. Dak.	* 6	7	12	*10.7	13.0	12.0	* 59	91	144
S. Dak.	* 16	31	29	*13.6	18.0	13.0	* 209	558	377
Nebr.	23	23	22	14.5	23.0	22.0	338	529	484
Kans.	139	167	237	10.6	15.0	14.5	1,471	2,505	3,436
Del.	33	41	44	12.8	12.5	15.0	414	512	660
Md.	28	33	34	13.4	15.5	16.0	372	512	544
Va.	68	106	117	14.4	16.5	18.0	994	1,749	2,106
W. Va.	1	1	1	12.8	13.5	13.0	14	14	13
N. C.	212	264	264	11.8	13.5	15.0	2,505	3,564	3,960
S. C.	12	23	25	7.6	10.0	11.0	97	230	275
Ga.	12	15	14	6.6	7.5	8.0	76	112	112
Ky.	59	121	119	14.5	19.0	18.5	892	2,299	2,202
Tenn.	39	67	60	12.3	20.0	19.0	525	1,340	1,140
Ala.	23	55	61	10.0	20.0	17.0	266	1,100	1,037
Miss.	79	133	108	11.8	18.0	15.5	998	2,394	1,674
Ark.	179	264	291	13.8	19.5	20.0	2,544	5,148	5,820
La.	26	35	25	12.6	14.0	15.0	330	490	375
Okla.	6	8	13	6.9	12.0	11.0	38	96	143
U. S.	8,025	10,430	9,912	18.7	21.4	22.4	148,381	223,006	222,305

‡ Equivalent solid acreage. (Acreage grown alone, with an allowance for acreage grown with other crops). * Short-time average.

Illinois, which produces more than one-third of the nation's soybeans had a record yield of 26 bushels per acre this year. Conditions in that state were excellent during the entire season. Iowa had some dry weather during the growing season, but yields turned out above earlier expectations. The after harvest yield at 22.5 bushels per acre was the same as in 1948. Record or near record yields were also produced in Ohio, Indiana, Minnesota and Missouri, the other main producing states of the North Central area. This area as a whole accounted for more than 200 million bushels of soybeans.

In the Northeast area drouth caused slight damage to the crop, but final yields turned out better than anticipated earlier in the season, and even better than the good yields of a year ago. The South Atlantic and South Central areas also had excellent seasons. A record yield was realized in Virginia while North Carolina for the first time in 3 years had a good harvesting season. The yield in that state equalled the previous record. Arkansas, the heaviest producing state in the South Central area, also reported a record yield. That state produced almost 6 million bushels of soybeans or nearly half the total output of the South Central states.

World Production

World soybean production in 1949 is placed at 501.7 million bushels according to a preliminary estimate of the Office of Foreign Agricultural Relations. This year's output is 10 percent below the record harvest of 558.4 million (revised) in 1948. Smaller crops are reported for the United States, China and several of the minor producing countries.

Canada's 1949 soybean crop of more than 2.6 million bushels is a

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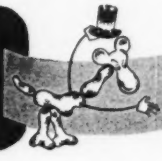

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SOYBEANS: Acreage, yield per acre, and production in specified countries, year of harvest, average 1935-39, annual 1946-49

Continent and country	Acreage					Yield per acre					Production				
	Average 1935-39	1946	1947	1948	1949[1]	Average 1935-39	1946	1947	1948	1949[1]	Average 1935-39	1946	1947	1948	1949[1]
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	Bush.	Bush.	Bush.	Bush.	Bush.	1,000 Bush.	1,000 Bush.	1,000 Bush.	1,000 Bush.	1,000 Bush.
NORTH AMERICA															
Canada	[2] 10	59	61	94	104	20.7	18.1	18.2	19.4	25.1	[2] 207	1,072	1,110	1,824	2,605
United States[3]	3,042	9,506	11,212	10,311	9,686	18.5	20.5	16.4	21.4	22.2	56,167	201,275	183,558	220,201	215,222
EUROPE															
Bulgaria	34	45	75	—	—	12.1	5.2	5.1	—	—	416	234	385	—	—
Hungary	[4] 7	5	8	6	—	16.9	10.4	10.1	15.1	—	[4] 125	56	81	90	—
Italy	[5]	2	7	5	5	12.1	15.8	20.9	21.9	26.7	[2] 1	27	150	107	130
Rumania	[2] 49	—	—	—	—	9.5	—	—	—	—	[2] 463	—	—	—	—
U.S.S.R. (Europe and Asia)	[4] 607	—	—	—	—	—	—	—	—	—	[4] 5,805	—	—	—	—
ASIA															
Turkey	[4] 1	—	5	5	5	29.0	—	10.8	15.3	14.1	[4] 37	16	55	71	66
China proper (22 provinces)	[6]12,411	11,599	11,641	11,309	11,900	16.7	17.0	17.3	18.6	15.0	[6]207,666	196,610	201,322	210,820	179,200
Manchuria	8,992	7,187	6,662	—	5,500	16.8	17.1	17.9	—	12.0	151,294	122,639	119,059	—	66,000
Japan	[3] 812	571	607	598	—	15.4	13.0	11.8	14.6	—	12,499	7,418	7,161	8,760	—
Taiwan (Formosa)	[2] 17	—	—	—	—	8.9	—	—	—	—	[2] 151	—	—	—	—
Korea[7]	[2] 1,921	561	568	487	656	10.0	8.8	8.2	10.1	10.0	[2] 17,654	4,924	4,666	4,924	6,899
Indonesia[8]	889	583	700	900	—	10.9	7.6	9.6	8.6	—	9,731	4,406	6,719	7,716	9,000
AFRICA															
Tanganyika	—	—	—	—	—	—	—	—	—	—	—	15	27	97	30
Union of South Africa	—	9	6	13	15	—	6.6	6.6	5.2	5.3	—	56	44	67	80
World total[9]	29,100	32,100	33,250	31,600	31,200	—	—	—	—	—	464,300	550,700	537,000	558,400	501,700

[1] Preliminary. [2] Average of less than 5 years. [3] Acreage harvested for beans. [4] One year only. [5] Less than 500 acres. [6] Partly estimated. [7] Beginning with 1946 figures represent South Korea only. [8] Java and Madura. [9] Includes estimates for the above countries for which data are not available and for minor producing countries.

Office of Foreign Agricultural Relations. Prepared or estimated on the basis of official statistics of foreign governments, reports of United States Foreign Service officers, results of office research, or other information. Prewar estimates for countries having changed boundaries have been adjusted to conform to present boundaries, except as noted.

record and exceeds that of a year ago by 43 percent. This is the sixth consecutive season that soybean production has shown an increase. During the crop year ended July 31, 1949, imports of soybeans and oil in terms of beans amounted to 873,000 bushels.

United States produced about 215 million bushels of soybeans in 1949. While this outturn is 2 percent smaller than the record harvest of 1948, this country is again the world's largest soybean producer. The yield of 22.2 bushels per acre is the highest recorded for the United States.

European soybean production is declining. Italy is the only country reporting production in the current year. The 1949 crop is estimated at 130,000 bushels compared with 107,000 in 1948.

China's 1949 soybean crop, estimated at 179.2 million bushels is 15 percent less than in 1948 despite an increase in acreage.

Manchuria's 1949 soybean crop of 66.0 million bushels is less than half

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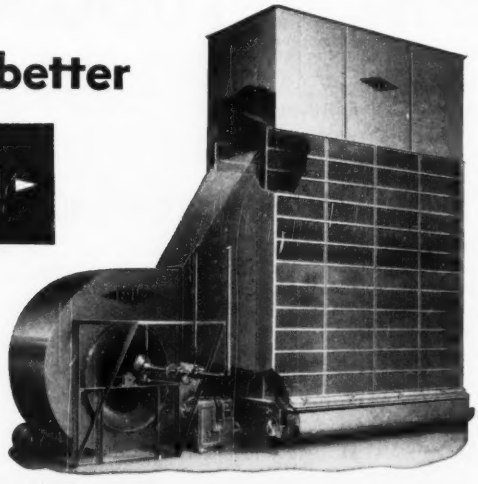

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the prewar output. Production has declined in recent years chiefly because of the difficulty of marketing the beans and the tendency to grow more grains.

Japanese soybean production has not been reported for 1949 but is expected to equal the 1948 harvest of 8.8 million bushels. It is difficult to obtain accurate estimates of production in Japan as plantings are principally on small plots for direct consumption by the producer. Possibly not more than one-tenth of the total output is available for oil extraction.

South Korean soybean production continues to increase. The 1949 estimate is 6.9 million bushels compared with 4.9 million last year and 4.7 million in 1947. The entire crop is consumed within the country either as food or in the manufacture of edible products. Apparently there has been little, if any, commercial production of soybean oil in South Korea. The Government program for 1950, however, calls for the production of 250 to 300 short tons of oil from soybeans collected this fall.

Indonesian soybean production of 9.0 million bushels is somewhat larger than in 1948 and only 8 percent below the prewar average. Apparently the Government is interested in expanding soybean output. It was suggested at the recent agricultural conference in Buitenzorg that production be increased by 3 to 4 million bushels.

Brazil's soybean production has increased steadily in the past few years. The 1949 estimate is 1.0 million bushels compared with 730,000 last year and 430,000 bushels in 1947.

Soybean exports are not separately classified in Brazil's official statistics but reports indicate that shipments amounted to more than 400,000 bushels in 1948 and possibly have been much larger during the current year.

WEISS SUCCEEDS MORSE AT BELTSVILLE

A shift in the research personnel of the Iowa Agricultural Experiment Station, Ames, was announced by Dr. Charles E. Friley, president of Iowa State College.

Dr. Martin G. Weiss, research professor of agronomy, has resigned, effective Jan. 15 to accept a position with the Division of Forage Crops and Diseases, United States Department of Agriculture, Beltsville, Md. He will be leader in charge of soybean investigation for the Bureau of Plant Industry, Soils and Agricultural Engineering, succeeding W. J. Morse who retired Dec. 1. Under his jurisdiction will be the U. S. Regional Soybean Laboratory at the University of Illinois and soybean work in 12 north central and 12 southern states. In addition he will supervise pathological work in a number of states.

Weiss will be replaced on the Iowa State College campus by Dr. Robert R. Kalton.

Kalton will conduct research work on brome grass and orchard grass improvement, and will assist in the soybean program at Iowa State.

Kalton was associate agronomist, oilseed investigation, with the Texas Research Foundation, Renner, Tex., when he accepted the Iowa post. He was agent in charge of soybean investigations in Iowa for the U. S. Regional Soybean Laboratory from July 1, 1944 to June 30, 1946, and was stationed at Ames. The following year he was an industrial fellow in soybean research for the farm crops subsection of the Iowa Agricultural Experiment Station. He has held his present position in Texas since July 1, 1947.

Weiss became a United States Department of Agriculture collaborator at the Iowa Agricultural Experiment Station in 1936.

MARTIN G. WEISS

ROBERT R. KALTON

In 1938 Weiss made the cross of Mukden and Richland soybeans from which the present Hawkeye soybean originated. He also helped lay the groundwork for the development of the Adams variety.

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Soybean Oil Meal in SWINE PRODUCTION

By W. M. BEESON
Department of Animal Husbandry, Purdue University

From talk presented before Soybean Processing Conference, Urbana, Ill.

SOYBEAN OIL MEAL has probably contributed more to the basic knowledge of swine nutrition than any other single feed. It has been shown repeatedly that soybean oil meal is an excellent protein supplement and is particularly well adapted to the balancing of corn, especially when hogs have access to green pasture.

In recent years it has been shown that soybean oil meal is lacking in certain nutritional factors which are necessary for maximum development and growth of the pig. Most of the new evidence indicates that a ration of corn, soybean oil meal, minerals and cod liver oil is lacking in certain unknown factors, rather than quality of protein.

It appears that our basic problem is to identify and characterize the nutritional factors which are necessary to fortify soybean oil meal so that it will completely balance corn. In other words, how can we modify corn and soybean oil meal so that it will be a perfect diet for hogs?

There are three fundamental approaches to this problem:

1—The improvement of soybeans by plant breeding and soil nutrition.

2—Improvement by processing techniques.

3—Improvement by correcting the deficiencies of a corn, soybean oil meal ration by supplementation. Recent research at Purdue has shown that a corn, soybean meal ration can be improved by supplementation.

Amino Acids

Little is known about the amino acid requirements of swine. Recently, at Purdue, we have shown that both tryptophan and lysine are required for normal growth and development of the pig. In a 21-day period, pigs fed on a diet complete in all known factors, excepting tryptophan lost 8 pounds in weight while the pigs receiving 0.4 percent of tryptophan gained 25.5 pounds in the same period. The only difference in the two diets was the presence of tryptophan. Similar results were obtained with lysine. Pigs fed on synthetic diets deficient in lysine lost 2 pounds over a 20-day period while the pigs receiving 2 percent of DL lysine in the diet gained 25 pounds.

These data are not presented to imply that soybean oil meal is deficient in tryptophan and lysine. They are presented to show the drastic effects of amino acid deficiencies and to support the fact that soybean oil meal is an excellent source of tryptophan and lysine for the supplementation of corn. Corn is deficient in tryptophan and lysine. As yet no one has proved that soybean oil meal is lacking in amino acids for the growth and development of swine with the possible exception of methionine. Methionine is probably the only amino acid that might be a limiting factor and it has not been proved that this is the case. It appears then from these data that our problem is not so much one of amino acid balance but one of finding other factors which will supplement a corn, soybean oil meal diet.

Fat Requirements

The introduction of solvent extraction of soybean oil meal and other protein supplements has lowered the fat percentage in hog rations. In order to find out if low fat diets have any influence on swine nutrition, a recent experiment has been conducted at Purdue to study the fat requirements for growth. A fat deficiency disease was produced in swine by the feeding of a synthetic diet containing 0.06 percent of ether extractable material. On this diet pigs showed symptoms of fat deficiency disease characterized by scaly skin, loss of hair coat, scaly tails and decreased growth. These data indicate that fat is required by swine but in very small quantities. In another experiment in which we used a diet containing 0.1 percent fat it required a considerable period of time to produce fat deficiency symptoms. Probably a diet containing 0.5 percent fat would be adequate for swine nutrition and even a lower figure might supply all of the essential fatty acids.

The chance then of compounding a practical diet that is deficient in fat is very unlikely even though solvent extracted meals are used in balancing swine rations.

Fish Solubles

Several experiments have been conducted to determine the supplementary value of adding fish solubles to a ration of corn, soybean oil meal, alfalfa meal, minerals and

cod liver oil when fed to hogs confined to dry lot. In the first experiment (1947) the addition of 1 percent of fish solubles to the basal ration caused the pigs to gain 26 more pounds in a 140-day period and the pigs on 2 percent of fish solubles gained 37 pounds more than the controls. Pigs receiving 1 or 2 percent of fish solubles in the total ration required 20 percent less feed to produce 100 pounds of pork. In the second experiment conducted in 1948, the pigs receiving 1 percent of fish solubles gained 35 pounds more in a period of 112 days and the pigs on 2 percent fish solubles gained 58 pounds more than the controls. In all cases the pigs receiving fish solubles gained significantly more than the controls.

These data indicated that some nutritional factor or factors other than protein are contained in fish solubles which contribute materially to balancing a corn, soybean oil meal ration for swine growth and fattening.

Liquid Fish

A similar experiment was conducted with liquid fish to compare the potency of liquid fish with fish solubles for supplementing a corn, soybean oil meal ration. Pigs receiving 2 percent of liquid fish made about the same increase in rate of gain and feed efficiency as the pigs receiving 1 percent of fish solubles. Two years' research has shown, in general, that liquid fish has half the potency of fish solubles for supplying the unknown factors.

Vitamin B_{12}

Paired litter mate pigs were fed on a basal ration composed of corn, soybean oil meal, alfalfa meal, minerals and cod liver oil with and without vitamin B_{12} concentrate. The B_{12} concentrate (Merck & Co.) was added to the basal diet at the rate of 0.5 percent. This experiment is still in progress but at the present time the pigs receiving the B_{12} concentrate have gained on an average 41 pounds more in the same period of time than the control litter mates. During the first 6 to 8 weeks of the experiment there was very little difference between the pigs on the control and the B_{12} diets, indicating that vitamin B_{12} is apparently stored, to some extent, in the body of the pigs. Preliminary observations show that a vitamin B_{12} concentrate definitely supplies some of the unknown factors necessary to balance a corn, soybean oil meal ration for pigs.

Nutrition of Unborn Pig

Several years' research at Purdue has definitely indicated that pigs that are nutritionally well born seldom die. Many of the death losses in newborn pigs are due to the lack of some nutritional factor or factors necessary for the development of the pig during embryonic life. When a corn, soybean oil meal ration with minerals and cod liver oil was fed to pregnant gilts in dry lot they weaned 40 percent of their pigs with an average of three pigs weaned per gilt. When gilts of similar breeding were fed on a ration fortified with either 15 percent of alfalfa meal or alfalfa pasture the gilts weaned from 80 to 84 percent of the pigs farrowed, and averaged from seven to seven and one-half pigs per gilt weaned. Continuous research on this problem by Indiana and many other experiment stations has conclusively shown that a diet of corn, soybean oil meal, minerals and cod liver oil is inadequate for the proper nutrition of the pig during its unborn life. Apparently there are certain unknown factors which are contained in high quality alfalfa meals or green pasture which

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contribute to the health, strength and livability of new born pigs.

It should be emphasized that when legume hays have been stored for long periods of time or have been processed under poor curing conditions they have probably lost many of the nutritional factors required by hogs. Poor quality legume hays are of questionable value.

At the present time we are testing other supplements which may contain these unknown factors which contribute to the life of newborn pigs.

Concluding Remark

Soybean oil meal will become more important as a protein supplement for swine when all of the factors necessary for growth and development of the unborn, suckling and weanling pig have been identified.

—s b d—

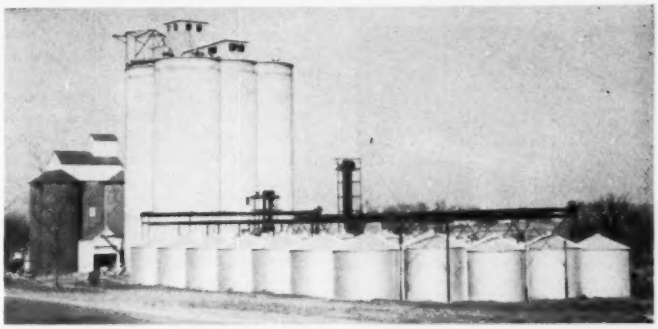
LOWER OIL TARIFFS

Reciprocal trade agreements negotiated at Annecy, France, last summer included tariff reductions by the United States in edible olive oil and a limited quantity of butter, reports Fats and Oils Situation of the Bureau of Agricultural Economics. U. S. imports of palm oil were bound free. The principal reductions granted (on fats and oils) by other countries to the United States were those on lard by Italy and Finland, and on soybean oil by Italy. The United States approved the Annecy agreements on Oct. 10, under the authority granted the President by the Reciprocal Trade Agreements Act.

The effects of the U. S. tariff concessions made at Annecy on our imports will be limited by import controls, at least through June 30, 1950 when present legislation authorizing import licensing will expire.

In the agreements Italy lowered the surtax on soybean oil from 95 percent to 25 percent. Value of soybean oil exported to Italy in 1948 was $1,019,000.

New Storage by Iowa Processor



You see part of the 550,000-bushel storage of Central Iowa Bean Mill at Gladbrook, Iowa. Firm stores in stave silos, cement tanks and steel bins. Over 350,000 bushel-capacity storage space was added in the summer of 1949. The system that distributes the soybeans to the steel storage tanks in foreground was constructed by Paul H. Klinefelter, the owner.

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John E. Bastien of John E. Bastien Grain Co., Chicago, is distinguished in two ways:

He is the oldest living member of the Chicago Board of Trade, being 87 years old, and

He handled the first carload of soybeans ever to arrive in Chicago.

Bastien now lives in Muskegon, Mich., and spends his winters in Florida, but he still operates a grain business in the Board of Trade Building. His firm is a big handler of cash corn.

In November the veteran grain man visited the soybean pit on the Chicago Board of Trade. He said he could hardly realize all the changes there have been in the soybean trade since the first car came into Chicago 23 years ago.

His account of the first carlot of soybeans as reported by the Associated Press:

"I remember that John Brennan, who is now dead, had the car," Bastien said. "He peddled it all around the floor, but nobody wanted it because no one knew what soybeans were.

"Late that afternoon Brennan came around to me and said, 'I've got to sell this stuff. What will you give me for it?'.

"I called the old Hayford elevator and asked them if they had any room. They said they had and I told Brennan, 'well, I don't know what it is, and I don't know how it can be used, but I'll take a chance and give you 88 cents for it'."

Bastien kept the soybeans in the elevator for 2 years before he could find a buyer for them. "But when I finally sold them, I made $200 on the deal."

—sbd—

SOY ADHESIVE BASE

From the Research Laboratories of General Mills has emerged an extracted soy product developed specifically for use in plywood adhesives. This product, in addition to being high in dispersible protein content, possesses uniformity and adhesive properties heretofore not attained in a product of its type.

This product, produced in flake form and available through General Mills chemical division, Minneapolis, is available in two viscosity ranges, namely, (1) low viscosity (Lotex*)[1], and (2) high viscosity (Hitex**)[2]. Both types are being used successfully in plywood adhesives.

[1] 85%-90% of total protein, soluble in water at 25° C. *Trade name registered.

[2] 75%-85% of total protein, soluble in water at 25°C. **Trade name being registered.

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INCREASE TUNG CROP

Domestic production of tung oil is likely to continue to increase for several years, since the number of tung trees has increased rapidly since 1930 and many of them are still young, according to a study by Edgar L. Burtis and Sidney Gershen of the Bureau of Agricultural Economics, USDA, Washington, D. C.

Output of tung oil rose from less than 500,000 pounds for the 1939 crop to nearly 20 million pounds for the 1949 crop. The Agricultural census of 1945 indicated about 9,500,000 tung trees compared with 350,000 in 1930.

"Future price prospects for tung oil are uncertain," the authors of the report say. "War in China this year, which has resulted in a sharp decline in imports of tung oil, has tended to keep the prince of tung oil up. Uncertainty about Chinese supplies in the future will continue to affect the domestic market."

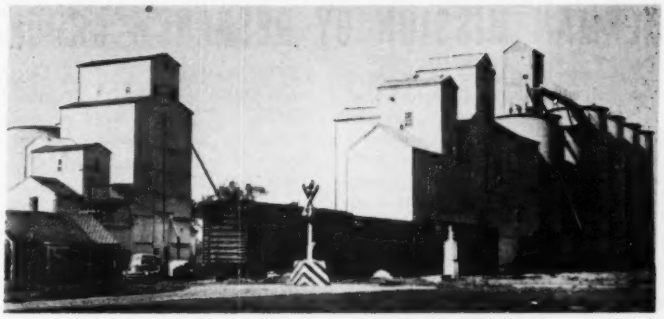
Price support for tung nuts is contained in several of the long-range agricultural bills now pending before Congress.

— s b d —

CORRECTION

An item reminding readers of the three films which are available through the American Soybean Association which appeared on page 34 of the December issue of The Soybean Digest, stated that J. C. Hackleman of the University of Illinois assisted the Allis-Chalmers Co. in the production of "The Soybean Story." The story should have said that Dr. W. L. Burlison, head of the Department of Agronomy, University of Illinois, was responsible for the pictures obtained at the university experimental farm.

We extend our apologies to Dr. Burlison and to the Allis-Chalmers Co.



Part of the plant of the Assumption (Ill.) Cooperative Grain Co.

SIMCOX AN EARLY COMBINE USER

C. G. Simcox of Assumption, Christian County, the newest Illinois member of the American Soybean Association board of directors, was a pioneer soybean producer in what has long been one of the nation's heaviest producing areas.

Simcox was also one of the earliest users of the combine to harvest soybeans. He has been farming since 1912.

From 1923 to 1929 he operated a country grain elevator. In 1934 he was urged by a group of farmers to take the leadership in the organization of a farmers cooperative grain company although there were three elevators in Assumption at the time.

The undertaking was started that same year. "The first 8 months in business we scooped 280,000 bushels of grain in cars," says Simcox. The firm built a 10,000-bushel elevator the next year and has added storage at different times until the present capacity is 290,000 bushels.

The firm is now handling more than a million bushels of grain annually, about 400,000 bushels being soybeans.

The firm is now known as the Assumption Cooperative Grain Co. It has no outstanding capital stock, the entire business having been paid for out of savings.

Simcox has served as manager since the beginning. He has been a director of the Assumption Mutual Fire Insurance Co. for 20 years and served as its secretary and general manager for 19 years.

He is director on the board of control of the Kemmerer Orphans Home, a Presbyterian orphanage, and serves on the house committee that manages the home. He manages the farm lands belonging to the home.

Simcox says his greatest pleasure in life is doing something that will help the other fellow. When elected a director of the Association he accepted although he said he already had too many jobs. He had seen the many benefits derived from the activities of the Association and foresaw the future possibilities of help to the soybean industry through the Association.

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GERMAN MISSION BY RESEARCH GROUP

Two members of the Sova Food Research Council, R. G. Brierley of Minneapolis, and Kenneth Shuman of Indianapolis, will constitute a special mission to Germany on studies for utilization of edible soy protein in the diet. The trip will be made on invitation of the government of Western Germany.

An extensive series of meetings will be held in various cities and towns in cooperation with leading government food authorities and key men in the bakery, meat and other interested industries. Illustrated lectures with lantern slides depicting production and utilization of soy flour will form a part of the educational program.

A vear ago Brierley made a 6-weeks trip through the Bizone district under the auspices of the United States Army. One constructive result was a series of laboratorv tests in this country on the utilization of sov in sausage and other meat products.

Mr. Shuman will serve as director of nutrition and, among other things, will show how soy protein has long been effectively used in this country in bakery products, cereals, sausage and other meat products, confectionary and various other products consumed in large volume.

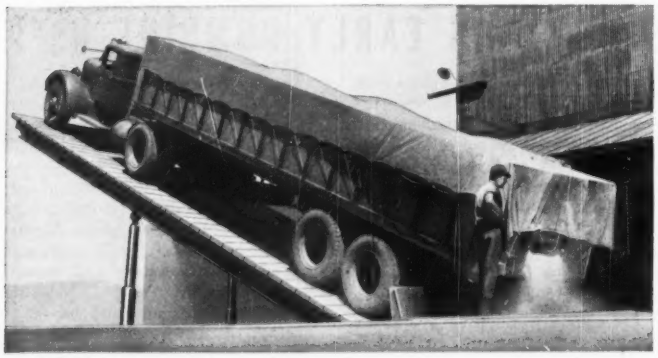
Recently Dr. J. L. Cartter, director of the Regional Soybean Laboratory of the U. S. Department of Agriculture at Urbana, Ill., and George M. Strayer, secretary-treasurer of the American Soybean Association, Hudson, Iowa, completed a 6-weeks survey of soybean production and utilization in West Germany at the request of German Food Ministry Officials and under the sponsorship of the Economic Cooperation Administration.

They found soybean production uneconomical in light of low yields, as compared with high yield of carbohydrate crops. They also found a marked shortage of protein levels of the diet for maintenance and growth of the human body. They recommended that soy protein in small amounts should be incorporated in staple items of the average diet. Specifically, in their report to ECA and the German Food Ministry they recommended use of soy flour in bread from 3 to 5 percent, and use in sausage at the 11 percent level. Such usage would require substantial shipments of sov flour, which is the lowest cost protein and one of recognized superior quality. It would redound to the benefit of soybean growers in this country and the producers of all other oilseeds in a period when such outlets would be most beneficial.

During the war and postwar periods some 25 foreign nations used American soy flour, purchases being made through lend-lease, UNRRA and later the Army for consumption in Germany, Japan and elsewhere.

When ECA began functioning under Marshall Plan Funds, Dr. D. A. Fitzgerald, chief of the food division, announced that full emphasis would be placed on raw materials and, in effect, the more finished products would be used only when necessary. Leaders of the soybean industry point out that while millions of dollars have been allocated by ECA for other far more costly edible proteins, only two minor allocations of funds, and those in recent months, have been made for the lowest-cost protein by ECA.

Some confusion arose over heavy early shipments of soy flour to Ger-



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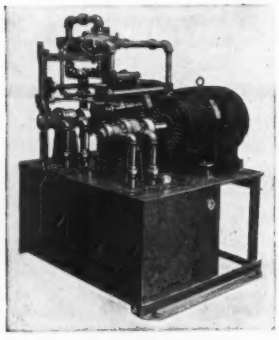

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Powerful TWIN Hydraulic Unit. Raises to full height in 41 seconds, lowers in 20 seconds. Maximum safety because of "oil-locked" hydraulic control and cushioned lowering. No danger of accidents.

Easy operation and simple controls . . . one man operates the Dumper and Wheel Stops from one location where he can see and control the complete unloading operation. Greatly reduces labor costs.

Evidence of KEWANEE performance and economy is overwhelming. It is substantiated by successive repeat orders from leading firms who have installed them at all their plants.

One elevator reports unloading more than 1,000,000 bu. of grain in one month's operation with a two man crew, averaging over 100 trucks each working day.

The KEWANEE Dumper will widen the area you can serve and increase your volume. Truckers appreciate "no long waiting in line" and they tell others. It attracts new customers and builds your business. Find out *today* how KEWANEE will solve your unloading problems.

Write TODAY for Bulletin HD-4

KEWANEE MACHINERY & CONVEYOR CO., Kewanee, Illinois

many by the Army, as proper plans had not been completed in Germany for its judicious usage. This developed in an emergency situation, and criticism could not properly be placed either against the Army or the German Food Ministry. It is suspected that this situation may have influenced ECA to some extent, as well as sections of the food trade in Germany.

Across the soy belt intense interest centers in the results that are expected to come from the work of the special mission, which is expected to leave in late January. It is anticipated by all branches of the soybean industry and related oilseeds trades that if full cooperation is accorded a very substantial market will be opened up.

A number of congressmen in the soy belt have interested themselves, both from the standpoint of farmer welfare and from the standpoint of economy. It is generally agreed that the ECA appropriation will be reduced this year—current talk is a 25 percent cut—and that in view of the existing protein shortage very substantial sums can be saved by the judicious use of soy protein in Western Germany and in other protein-short Marshall Plan countries.

NEW YORK LEADS AS A SOYBEAN OIL MARKET

New York state offers a potential market for 9 percent of the soybean oil consumed in the United States, a study by Robert S. Aries and William Copulsky of R. S. Aries & Associates, Brooklyn, N. Y., firm of consulting engineers and economists, reveals.

New York leads California and Ohio as a potential market for soybean oil in spite of the fact that no margarine is manufactured in the state. California offers 8 percent of the U. S. market for soybean oil, Ohio 6 percent. The firm investigated the economics of the vegetable oil industry and the uses of oils for edible and industrial purposes.

Margarine offers a total potential market for 228 million pounds of soybean oil in the U. S., with 30 million pounds in Ohio, and 32 million pounds in California.

Other potential U. S. markets for soybean oil: other edible products, total 365 million pounds; New York 87 million pounds; Ohio 35 million pounds; California 61 million pounds.

Paint and varnish, total 89 million pounds; New York 11 million pounds; Ohio 9 million pounds; California 8 million pounds.

Other uses, total 112 million pounds; New York 13 million pounds; Ohio 7 million pounds; California 6 million pounds.

"The location of margarine plants in the United States is abnormally distributed, and follows not population (as might be expected) but legal technicalities," states the report.

—s b d—

PEANUT PRODUCTION

World peanut production is expected to establish a new record in 1949, according to preliminary information available to the Office of Foreign Agricultural Relations. Total output is forecast at 11,460,000 short tons of unshelled nuts, representing an increase of 4 percent over the 1948 output of 11 million.

The expansion over 1948 is attributed to the sharp increase in India, the world's largest peanut producer. Limited information indicates slightly larger harvests in China, Indonesia, French West Africa, and Gambia. Sizeable decreases occurred in the United States, Nigeria, and Brazil.

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Jim Smothermon of Blytheville (second from left) receives the Ed Critz trophy as first place winner in the North Mississippi County, Ark., third annual soybean yield contest. Presenting the trophy at award banquet was E. E. Chandler, chairman of the Blytheville Jaycee contest committee. Smothermon holds the $100 first place cash money in his hand. At left is John Hollingsworth, Yarbro, third place winner; at right is J. P. Harmon, Clear Lake, second place winner.

NEW YIELD RECORD AT BLYTHEVILLE

For his record yield of 50 bushels per acre, Jim Smothermon, Blytheville, Ark., has been presented the Ed Critz trophy and $100 as winner of the Third annual North Mississippi County soybean yield contest.

The annual contest is sponsored by the Blytheville Junior Chamber of Commerce. Winners of the 1949 event were announced at a banquet at the Jaycee clubhouse attended by nearly 100 planters and Jaycee members Dec. 12.

Placing second with a yield of 48.9 bushels per acre was J. P. Harmon of Clear Lake, Ark. John Hollingsworth, Yarbro, Ark., was named third place winner. The yield from his 5-acre contest plot was 45.8 bushels per acre.

Smothermon's yield was the largest recorded yet in the soybean raising competition launched 3 years ago by the North Mississippi County Planning Committee. E. E. Chandler, chairman of the Jaycee soybean contest committee, presented the awards.

Forty-six growers entered the 1949 contest, the largest number of entries to date.

Speaker at the banquet was Geo. M. Strayer, secretary-treasurer of the American Soybean Association, Hudson, Iowa. Strayer said only the lowering of tariffs and elimination of trade restrictions would give the U. S. access to a wide-open market in Germany for this nation's crops.

"I am convinced," said Strayer, "that we will never have peace until someone takes the lead in breaking down trade and exchange barriers.

"But the leadership must come from this agricultural area and not from the industrial East or West Coast.

"We in agriculture must assume the leadership in world affairs to sell our future crops."

Strayer also said he was "firmly convinced that there is a market in Europe for 100 million bushels of soybeans for a period of years if we will make sacrifices and take things they have to sell."

Because of the possibility of a 300-million-bushel soybean crop in 1950 Strayer said it has become necessary to do "some serious thinking about what to do with this 1950 crop."

The Germans, Strayer pointed out, are craftsmen and make many things needed in this country. He cited examples of articles such as watches, cameras and precision instruments that are available in Germany cheaper than in the U. S.

Soybeans, Strayer said, mean dollars and cents to Blytheville and Mississippi County businessmen because they are a cash crop. Production of soybeans means a chance to diversify crops and scatter the farm work load throughout the season, he said.

Serving with Chandler on the Jaycee yield contest committee were Johnson Blackwell, James Rogers, Ben Henderson, William H. Wyatt and Bob Lee Smith. Smith served as banquet toastmaster.

— s b d —

Two soybean producers gazed admiringly at the beautiful dress of the leading chorine.

"Who made her dress?" one asked his companion.

"I'm not sure, but I think it was the police."

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SOYA FOOD RESEARCH COUNCIL BROADENED

Future research and development on soy flour and other edible soy proteins will all come under the Soya Food Research Council.

This Council was organized in 1936 as a part of the Soy Flour Association and most of the activities of the Association have come under the direction of the Council.

At a meeting of the Association Dec. 9 it was pointed out that "more and more it has been realized that the objectives of the Association are definitely in the field of scientific research, development, and product utilization studies," and that therefore the Council was more representative of the cooperative aims of the industry.

Accordingly, the Soy Flour Association was discontinued, with a view to intensifying the work of the Council, broadening its activities, and enlarging its scope of membership.

E. A. Buelens of Chicago was elected chairman of the executive board; Edward J. Dies, Washington, director of the Council, and Dr. J. W. Hayward, Minneapolis, chairman of research. Other officers and members of the Council will retain their former posts.

Soybean growers will in the future be represented on the Council by George M. Strayer, secretary-treasurer of the American Soybean Association, Hudson, Iowa.

—s b d—

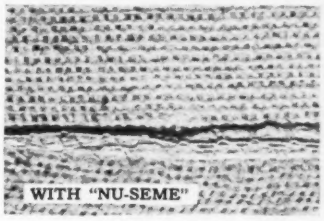
FUTURES STUDY

An economic study of the operation of organized futures markets and their part in the marketing and distribution of agricultural commodities has been undertaken by the Brookings Institution, it is announced by the Institution and the U. S. Department of Agriculture.

This research is being financed jointly by a grant from the Merrill Foundation for the Advancement of Financial Knowledge, Inc., and a research contract with the Department of Agriculture, under provisions of the Research and Marketing Act of 1946. The work is expected to require 3 years for completion.

The project was undertaken in response to requests, both within the government and among farm and trade groups, for an appraisal of the role of organized futures trading in the marketing of agricultural products.

Mills throughout the middle west are saving up to $1 a ton in sacking costs by using 'NU-SEME' bags . . . an exclusive, patented Western Burlap Bag Co. product. And, at the same time, they're getting bags that look as good as brand new AND ARE JUST AS STRONG! . . . with their regular colorful imprint!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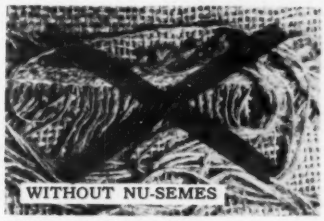
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Publications

PROGRAM PUSHES N. C. SOY ACREAGE

County-wide demonstrations on approved practices in growing soybeans are paying off in North Carolina and resulting in increased use of better production methods among farmers in that state.

Nine steps necessary for profitable soybean yields were suggested by the North Carolina Experiment Station as follows:

1. Have your soil tested and limed when needed.
2. Provide adequate fertility.
3. Prevent fertilizer injury.
4. Plant an adapted variety.
5. Provide enough plants.
6. Treat seed to prevent seedling diseases.
7. Prepare a good seedbed.
8. Control weeds early.
9. Control insects.

Results at the Station showed that when the nine steps were properly applied the state average yield could be doubled profitably.

Agricultural leaders were first acquainted with the practices; then in 1948 county-wide demonstrations were put on in Currituck County. Over 95 percent of the 116 demonstrations completed in the county yielded above the state average.

The demonstrations have given farm leaders, farmers and the fertilizer industry a chance to observe the practices on a farm scale. Most demonstrations used the Ogden variety.

Use of the recommended methods is spreading among farmers in Currituck and adjoining counties.

AN APPROVED SOYBEAN PROGRAM FOR NORTH CAROLINA. By E. R. Collins and L. A. Powell. Better Crops with Plant Food, Washington, D. C., Oct. 1949.

Artificial Light

The growth and composition of soybean plants produced in a controlled environment with a C-arc lamp as the principal source of radiation have been determined, as reported in Plant Physiology.

The arc was used alone with several types of carbons or was supplemented with a small amount of incandescent radiation. The carbohydrate content of leaves and stems was greatly increased by supplementing the radiation from "Sunshine" carbons with incandescent-filament radiation.

The merits of the C arc as a source of radiant energy for plant growth are discussed. Radiation from a C arc supplemented with incandescent-filament lamps is superior to any other type for growing many kinds of plants.

GROWTH AND COMPOSITION OF BILOXI SOYBEANS GROWN IN A CONTROLLED ENVIRONMENT WITH RADIATION FROM DIFFERENT CARBON-ARC SOURCES. By M. W. Parker and H. A. Borthwick. Plant Physiology, 345-358 (1949).

Turkey Feeding

For Broad-Breasted Bronze turkeys raised on wire a mixture of animal protein feeds (equal parts of fish meal, meat meal and buttermilk powder) was an effective supplement to a diet in which the sole protein supplement was soybean oil meal.

The minimum level of this animal protein mixture would appear to be at least 6 percent from the results obtained.

Five percent dried cow manure also proved effective. The addition of either cow manure or animal protein gave a supplementary effect during both the starting period and the growing period from 10 to 24 weeks of age.

The cow manure used appeared to contain a factor necessary for early rapid feathering and not supplied in sufficient quantities by 6 percent of the animal protein mixture.

There is a suggestion that the methionine requirement of the poult is less than 0.5 percent of the diet.

Sunflower seed oil meal used as the sole protein supplement in the diet is seriously deficient in lysine for the young poult.

An equal parts mixture of soybean oil meal and sunflower seed oil meal was not satisfactory as a sole protein supplement for rapid early growth.

SOYBEAN OIL MEAL AND SUNFLOWER SEED OIL MEAL IN RATIONS FOR BROADBREASTED BRONZE TURKEYS. By S. J. Slinger, D. C. Hill, K. M. Gartley and H. D. Branion, Ontario Agriculture College, Guelph, Ontario. Poultry Science, July 1949.

Poultry Supplement

The percentage utilization of proteins and the growth promoting properties of soybean oil meal alone

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and in combination with meat scrap or corn gluten meal for poultry have been reported.

Results are based on three series of experiments at West Virginia Agricultural Experiment Station.

Growth and metabolism trials were conducted on diets composed of whole-grain cereals, corn, wheat and oats, supplemented with soybean oil meal alone and in combination with meat scrap or corn gluten meal.

All test diets contained 16 percent total protein. One-half of the total protein was supplied by the cereal and the other half by the protein concentrate.

There was good growth and a high percentage of the protein was utilized when the basal diet was supplemented with a high quality soybean oil meal. Replacing the protein from soybean oil meal with that from meat scrap did not make a significant difference in the rate of growth or in utilization of protein.

There was a decrease in the rate of growth and amount of protein utilized when as much as one-half of the protein supplied by soybean oil meal was replaced by an equal amount from corn gluten meal.

Storing soybean oil meal for 2 years under laboratory conditions resulted in a decreased utilization of protein with a reduction in growth, even when supplemented with meat scrap.

SOYBEAN OIL MEAL ALONE AND IN COMBINATION WITH MEAT SCRAP OR CORN GLUTEN MEAL. By T. B. Clark, A. H. VanLandingham and C. E. Walker. Poultry Science, July 1949.

B_{12} for Pigs

Growth of weanling pigs fed a corn-soybean-oil-meal diet with no animal protein was greatly stimulated by the addition of Vitamin B_{12}, in a Michigan State College experiment.

Pigs receiving the Vitamin B_{12} averaged 17 pounds heavier than those on the check diet, at the end of 7 weeks. They utilized their feed more efficiently since it required only 2.65 pounds of feed to produce a 1-pound gain in body weight as compared with 2.94 pounds of feed for pigs on the check ration.

The check ration contained corn, soybean oil meal and a complex mineral mixture. To this was added crude vitamin B_{12} concentrate for the pigs in the second lot.

THE EFFECT OF VITAMIN B_{12} CONCENTRATE ON THE GROWTH OF WEANLING PIGS FED CORN-SOYBEAN DIETS. By R. W. Luecke, W. N. McMillen, F. Thorp, Jr., and Joanna R. Boniece, Michigan State College, East Lansing. Science, Aug. 5, 1949.

Soil Resources

FOOD FOR THOUGHT ABOUT FOOD, by Firman E. Bear Agronomy Journal, Nov. 1949.

An outstanding pronouncement on preserving our soil resources by the chairman of the soils department, New Jersey Agricultural Experiment Station, in his address as president of the American Society of Agronomy.

Miscellaneous

SESAME—NEW OILSEED CROP FOR THE SOUTH. By H. W. Simons, Jr., South Carolina Experiment Station, Clemson. Better Crops with Plant Food, Oct. 1949.

STUDIES ON THE PROTEIN OF SOYBEAN. THE EFFECTS OF NEUTRAL SALTS OF LOW CONCENTRATION ON THE STABILITY OF SOYBEAN PROTEIN DISPERSED IN WATER. By Masaru Funatsu. Journal of the Faculty of Agriculture, Kyushu University, May 31, 1949.

CIRCLEVILLE, OHIO
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PURINA'S NEWEST SOYBEAN MARKET
New Bloomington, Illinois, plant will process 250,000 bushels a month!
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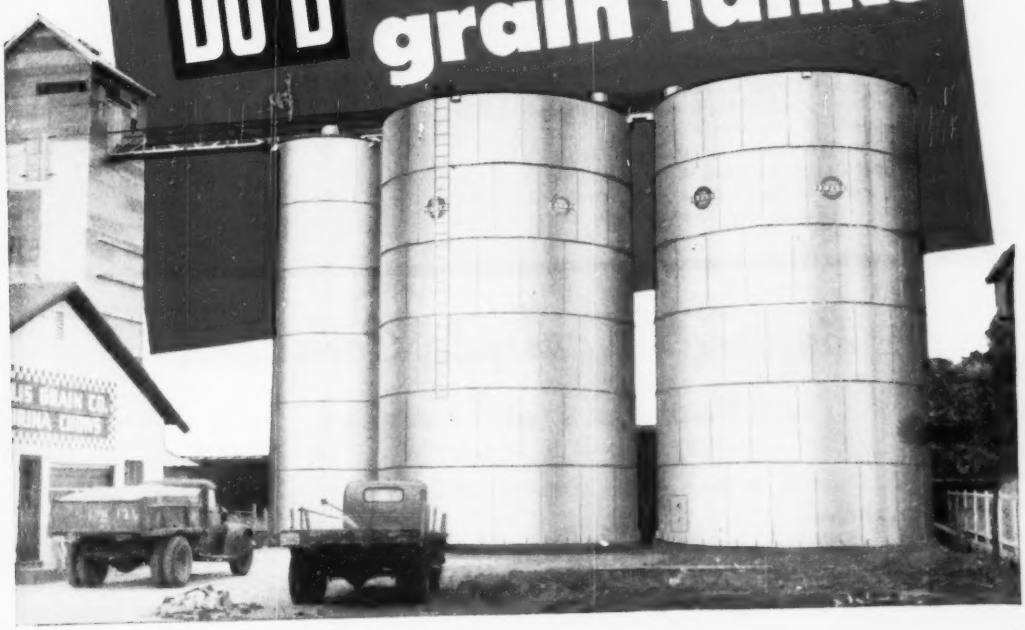

GRITS and FLAKES... FROM THE WORLD OF SOY

December issue of the Journal of the American Oil Chemists' Society contains the annual title and author index of all papers published in Volume 26. R. T. Milner, director of the Northern Regional Laboratory, Peoria, Ill., was editor until May. A. R. Baldwin of the Corn Products Refining Co., Argo, Ill., succeeded him.

* * * *

J. Frank Greeley was recently promoted to be general manager of the multiwall division of Fulton Bag & Cotton Mills at New Orleans, La., following the resignation of Fred E. Gross. J. A. Mundie, formerly connected with Fulton Bag's Dallas operations, moved to New Orleans the first of the year to assist Greeley.

* * * *

An article on the part played by the Illinois Central Railroad in the development of the soybean in Illinois appeared in the November issue of the firm's house organ, Illinois Central Magazine.

* * * *

Carl Paul Bauch, Fairfield, Iowa has recently been made vice president of the Doughboy Feed Co., New Richmond, Wis.

* * * *

Titans of the Soil, by Edward Jerome Dies, published by the University of North Carolina Press, has been selected as "Ambassador Book" by the book exchange of the English-Speaking Union in New York and London. Selection is based on what "best represents life and culture in the United States."

* * * *

Phi Beta Kappa, academic scholarship honor fraternity, presented its distinguished service medal to Dr. Percy L. Julian, who heads the Glidden Co's soya products research staff, in Chicago Nov. 30. The award was bestowed specifically for his work on cortisone.

* * * *

A farm facts handbook recently published by Black, Sivalls. & Bryson, Inc., 720 Delaware, Kansas City, Mo., is a ready reference for the farmer. Tables, charts and practical advice are intended to aid in answering questions which might arise each day.

* * * *

Howard L. Roach, president of Roach Soybean Mills, Plainfield, Iowa, was recently elected president of the Iowa Good Roads Association.

* * * *

Annual meeting of Big 4 Cooperative Processing Association, Sheldon, Iowa, was held Nov. 30 with a banquet. Tom Collins, Kansas City, Mo., was speaker and entertainment was furnished by the Sheldon a capella club.

* * * *

Charles F. Brooker, Thompson, Iowa, was elected a director of the North Iowa Cooperative Processing Association, succeeding N. K. Anderson, deceased, at the annual meeting of the cooperative in Mason City Dec. 6. Forty-two farmers elevators hold membership in the Association, which has headquarters at Manly.

JOINS BORDEN CO.

LOUIS F. LANGHURST

Louis F. Langhurst joined Borden's Soy Processing Co., in the capacity of extraction superintendent of the Waterloo, Iowa, plant Dec. 1, C. E. Butler, president, has announced.

Langhurst is a Cedar Rapids, Iowa, man. He was previously connected with Honeymead Products Co. and later with Cargill, Inc., there.

From 1946 to 1949 he was chief engineer of the solvent division of V. D. Anderson Co., Cleveland, Ohio, manufacturers of the Anderson type of solvent extraction plants. In this capacity, he supervised the installation of new Anderson plants in the U. S. and abroad.

Borden's are completing the installation of a 250-ton-per-day solvent extraction plant as an addition to their present plant in Waterloo.

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2. BECAUSE Multiwalls deliver full weight. Meal can't sift through a Multiwall Paper Bag—and there's no retention when the bag is emptied.

3. BECAUSE Multiwall Paper Bags give full protection to the product—protection against sudden showers, against caking or mildewing, against contamination.

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See how much less storage space Multiwalls take up. They're easier to handle, too.

AND REMEMBER —

Multiwalls cost you less than fabric bags

Multiwalls make packaging speedier and more efficient

Multiwalls permit better brand display right on the package

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YOU BUY PROTECTION WHEN YOU BUY MULTIWALLS

Reelected directors at the annual meeting of the Farmers Cooperative Co., Dike, Iowa, Dec. 6 were Elmer Dieken, Heye Dieken, and Horace Brown. Heye Dieken and Brown are president and vice president respectively of the organization. The firm operates a soybean processing plant in conjunction with the elevator.

* * * *

Albert Koolhof, Webster City, Iowa, reelected president of the Boone Valley Processing Association, reported at the annual meeting recently that nearly one million bushels of soybeans were processed last year. The firm operates plants at Eagle Grove and Hubbard in Iowa.

* * * *

"Mr. Julian is an institution in Conway . . . is friend and advisor to just about everyone in his territory" is quoted from the story about Julian Causey, sales agent for Esso Standard Oil Co., at Conway, S. C., which appeared in the November issue of The Lamp, house organ of the Standard Oil Co., of New Jersey.

* * * *

Wilson Honeymead Co., Foshay Tower, Minneapolis, Minn., has been established to serve Minnesota, the Dakotas and parts of Iowa and Wisconsin in the manufacture and distribution of feed products.

* * * *

Andre E. Briod, for 18 years with Nopco Chemical Co., is now connected with R. S. Aries & Associates, New York consulting engineers. Briod will devote his efforts to commercial chemical development problems, principally in the food and pharmaceutical fields, in the U. S. and abroad.

* * * *

A 20-page book No. 2305 has been published recently by Link-Belt Co., Chicago, illustrating and describing the materials handling and power transmission equipment that the company supplies to the grain and allied processing industries. Copy may be obtained from nearest office of the firm.

* * * *

Dr. Daniel I. Arnon, division of plant nutrition, University of California lectured on the essentiality of trace elements in plant nutrition at a short course and seminar held at the University of Missouri, Columbia, January 11 and 12.

* * * *

Lubrex 45, a new polyunsaturate-free fatty acid, developed for use in grease manufacturing, was announced recently by W. C. Hardesty Co., Inc., New York and Los Angeles.

* * * *

Appointment of S. R. Newell as chairman of the crop reporting board and assistant chief of the Bureau of Agricultural Economics was announced recently. Newell succeeds W. F. Callander, who retired December 31 after 45 years of government service.

* * * *

Central Soya Co., Gibson City, Ill., which has constructed 24 homes for employees since 1947, plans to start constructing five additional houses in the spring so that more plant workers can earn and own their own homes.

* * * *

Robert S. Aries, New York, consulting engineer and professor of chemical engineering at the graduate school, the Polytechnic Institute of Brooklyn,

L. T. LEONARD DIES

Lewis T. Leonard, well known agricultural bacteriologist and long-time specialist for the U. S. Department of Agriculture on the control of commercial inoculants for crops, died Dec. 7, at Garfield Hospital, Washington, D. C., after a brief illness.

Mr. Leonard entered the Department in 1904 in the Bureau of Vegetable Pathology and Physiology which later became the Bureau of Plant Industry.

During his 40 years of scientific work he was concerned with research on the bacteria forming nodules on the roots of legumes and with the related regulatory work. He was the author or co-author of some 30 articles which appeared in various scientific journals.

—s b d—

TO OPEN NEW LAB

Woodson-Tenent Laboratories, Memphis, Tenn., will establish a chemical laboratory in Decatur, Ill., specializing in the analyses of soybeans, oils, meals and feeds. Operations are expected to begin in January.

Biffle Owen has been appointed manager of the Decatur, Ill., laboratory. He is well qualified for the position as he has been manager of the oil refining department at the Memphis office since 1935. He is a member of the American Oil Chemists' Society.

This is the second laboratory the firm has established this year to serve the soybean industry. Last September, it opened a laboratory at Des Moines, Iowa, to serve the processors in that territory.

With the opening of the Decatur, Ill., laboratory, the Woodson-Tenent Laboratories now operate six full-capacity individual laboratories

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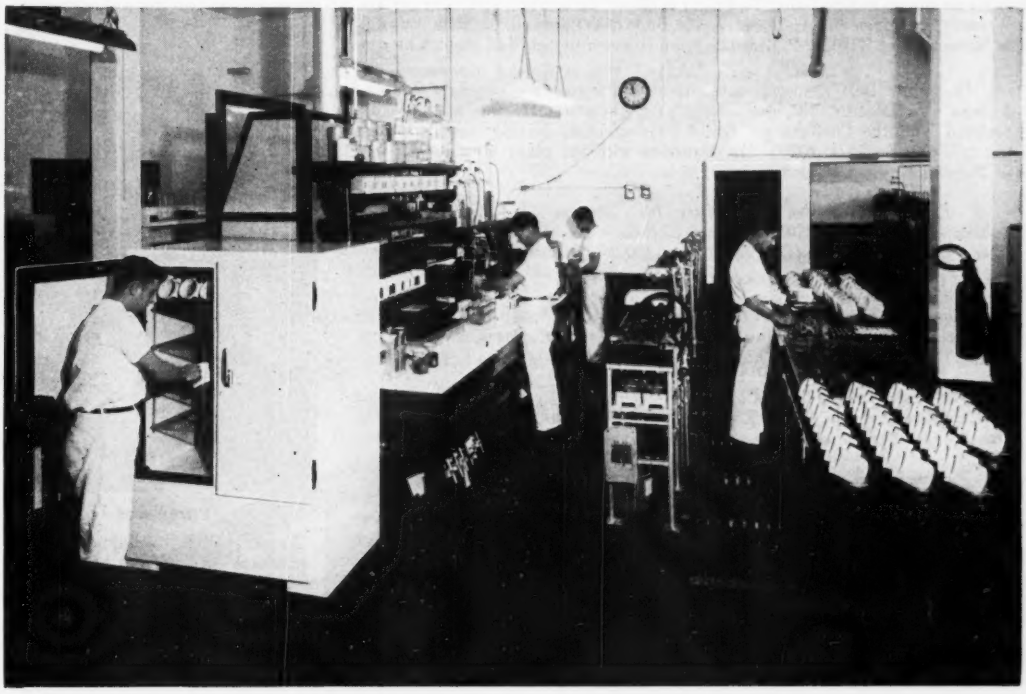

The Oil Refining Department at Woodson-Tenent Laboratories, Memphis, Tenn., has a capacity of 150 refinings a day. The special refrigerator is for cooling oils.

Official Chemists
National Soybean
Processors Assn.

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left December 21 on a business tour of the Caribbean area. Dr. Aries will visit the Dominican Republic, Venezuela, Cuba and Panama, where his firm is engaged in several industrial projects in the pharmaceutical, alcohol and wood utilization fields.

* * * *

Link-Belt Co., Chicago, announces the following changes in plant management personnel: Richard E. Whinery, from Dodge plant, Indianapolis to Ewart plant, Indianapolis; Raymond S. Wood from Minneapolis to replace Whinery at Dodge plant; Leslie J. Carson, from Caldwell plant in Chicago to Minneapolis; William P. Ridsdale from Houston to Caldwell plant, Chicago.

* * * *

Delmond "Dell" Sensenbaugh, production manager of Spencer Kellogg & Sons Co., Decatur, Ill., died recently in Decatur. He was formerly associated with the Shellabarger Grain Products Co., joining the firm when the mill was built in 1929. He continued with the plant after it was sold to Spencer Kellogg & Sons in 1937.

* * * *

Plant of McMillen Feed Mills, Inc., Marion, Ohio, has recently been changed to a 250-ton French solvent extraction unit. The storage capacity has been increased to 1,360,000 bushels. R. W. Fay is plant manager.

* * * *

Eugene D. Funk, Jr., president of the Funk Bros. Seed Co., Bloomington, Ill., recently was named to head the agriculture-industry relations committee of the Illinois Chamber of Commerce.

* * * *

Fire destroyed the Ward-Coppage Mercantile Co. cotton gin and elevator at Caruthersville, Mo., Dec. 1, with an estimated loss of nearly $100,000. About 1,000 bushels of soybeans were destroyed.

* * * *

Production of sunflowers for oilseed purposes has become an important farming enterprise in southern Canada, and the Red River Valley areas of Minnesota and North Dakota according to an article on sunflowers by Robert R. Kalton, Texas Research Foundation, which appeared in the November issue of The Cotton Gin and Oil Mill Press.

* * * *

A new 170,000-bu., 140-foot-high, concrete elevator is near completion for Ralph Wells & Co., Monmouth, Ill.

* * * *

Philip W. Pillsbury, Pillsbury Mills, Inc., has been appointed general chairman of the 1950 Farm Forum scheduled to be held in Minneapolis, Minn., Mar. 2-3, according to Ron Kennedy, member of the Minneapolis Chamber of Commerce agricultural committee which sponsors the affair.

* * * *

The Day Co. of Minneapolis announces the opening of a sales and service office at 855 Board of Trade Bldg. in Chicago under the direction of Frank F. Vytlacil. This office will do estimating, engineering and sales work of dust control, pneumatic conveying, bulk storage bins and related equipment.

* * * *

John W. Ticknor, one of the principal speakers at the National Farm Electrification conference in Chicago recently, called the "story of the American soybean the saga of Chemurgy." He said 700 industrial uses are being derived from this source.

to serve the processors in the industry. Other laboratories are located at Little Rock, Ark., Blytheville, Ark., and Cairo, Ill.

—s b d—

LYMAN PECK PASSES

LYMAN PECK

Lyman Peck, well-known feed consultant died after a heart attack at his home in Chicago on Dec. 14. He was 64 years old and had been in the feed and nutrition field for about 40 years. He was born in Omaha, where his father, Edward Peck, was a noted figure in the grain industry.

He served 7 years as director of nutrition for McMillen Feed Mills, Fort Wayne, Ind.; 8 years as head of the animal husbandry department of Merck & Co., Rahway, N. J., and 4 years in charge of the service department of Albert Dickinson Co., Chicago.

He appeared on the convention programs of the American Soybean Association and other organizations.

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WASHINGTON Digest

By PORTER M. HEDGE

Washington Correspondent for The Soybean Digest

ACREAGE CONTROL. A final decision on whether to have or not to have soybean acreage allotments in 1950 was still hanging fire as the new year opened.

Most officials in Washington had been figuring in the last month or so that acreage allotments were pretty sure for soybeans this year.

But now that the top policy makers are up against a decision one way or another, they are hesitating to take the plunge.

Allotments have been strongly recommended—by state PMA committeemen at the recent national conference in Memphis, and by operating officials here. They have been thoroughly discussed with members of the board of directors of Commodity Credit Corporation.

But, as the new year opened, a decision one way or another had not been made. However, it appeared for the first time in several months that allotments might be thrown out for 1950.

The proposal is to set a national soybean allotment slightly larger than 1949 acreage. The allotment would be on a harvested, not a planted, acre basis. Price support has been recommended at 90 percent of the new and higher parity—over $2.25 a bushel, if allotments are used.

There is no opposition in top quarters to the proposition that expansion in soybeans ought to be kept within bounds this year. In fact, officials estimate that without controls of any kind the diversion of acreage from corn and cotton would increase the harvested acreage of soybeans by as much as 4 million acres.

What's troubling officials is: Would an allotment program be effective? Would Congress support it? Would the Administration be laid open to the charge that it was attempting to control acreage for the sake of control alone?

These are some of the questions Secretary of Agriculture Brannan probably will take up informally with congressional leaders before he makes a firm decision.

At the time this was written, there were no reliable straws in the wind to indicate which way his decision might go. However, allotments appeared far less certain than a month ago.

The general plan on soybean allotments was to use a recent base period, probably 1947-48-49. Compliance with soybean allotments would not be required as a condition for obtaining corn or cotton loans.

The support price for soybeans grown this year would be higher with allotments than without them.

So far as this column has been able to determine, compliance with 1950 soybean acreage allotments would not be required in order to obtain corn or cotton loans.

This question of multiple compliance with allotments has come up before. General USDA policy *for this year* has been to make each allotment program stand on its own feet.

This is likely to be changed in 1951. A year from now it's probable that there will be a total allotment for the farm, with compliance required as a condition of getting price support on any of the major crops. But not for 1950.

The 3-year harvested acreage of soybeans is 10½ million acres. This is approximately 600,000 acres, or 6 percent, more than the harvested acreage in 1949, as estimated in the December crop report.

It appears likely that the total 1949 soybean allotment would be close to 10½ million acres. The object is to control the expansion in soybean acreage as more land is shifted out of corn and cotton, rather than to reduce acreage this year, if allotments are used.

MARGARINE. Repeal of federal taxes on margarine is scheduled as a first order of business with Congress, but this doesn't insure immediate passage.

The legislation is already through the House. But stumbling blocks are sure to be put in the way. One that could block quick passage in the Senate is the need for legislation to straighten out cotton acreage allotments.

Cotton allotments are in a mess. USDA insists it will take new legislation to fix them up. This has to be done fairly soon after Congress convenes—before planting.

House agriculture committee leaders are asking for a quick change in the law.

Margarine interests are fairly confident repeal legislation will be coming during this session, and fairly

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soon. However, the cotton situation provides an opportunity that strong opposing dairy interests will make full use of to put off the day as long as possible.

OIL FLAVOR HELP. Chemists have developed a process which uses citric acid to improve the flavor and keeping quality of soybean oil for salad dressings, shortening, and other foods.

So reports Omer W. Herrmann, assistant administrator of the Agricultural Research Administration. This is the agency which now administers the Agricultural Research and Marketing Act.

Herrmann says "not more than three or four ounces of the citric acid per ton of oil helps remove traces of certain metals which, in turn, retards the development of fish, grassy, and other off flavors.

"Oil refined by this process keeps three to five times longer than soybean oil refined by methods previously used.

"This is only one approach to the flavor stability problem however, and is little more than a start toward finding the causes and cure for soybean oil reversion.

"Many constituents of the oil are suspected of causing trouble. Only through further methodical research can we hope to get this important problem under control."

—s b d—

OHIO RURAL VOTE FOR MARGARINE REPEAL

Thumping majorities for repeal of Ohio's law prohibiting the manufacture and sale of yellow margarine were rolled up in the cities in the special election Nov. 8. But the law would have been repealed by a comfortable margin even without the big city vote, a county-by-county analysis shows.

Official vote for repeal was 1,282,606; against 799,473.

The 38 counties in the heavy soybean area of northwest Ohio went for yellow margarine by about the same margin as the state as a whole. The vote in favor was 365,208 in these 38 counties; against 265,849. Of course dairying is the leading farm industry in a number of the counties in this area.

Seven of nine of Ohio's metropolitan areas gave yellow margarine big majorities. Cincinnati gave the proposal a 4 to 1 ratio in favor; Cleveland, almost 3 to 1; Columbus, almost 3 to 1; Dayton, 2 to 1; Akron, 2 to 1; Toledo, 2 to 1; and Canton, 4 to 3.

Vote in counties where dairying is the leading source of farm income showed that farmers were far from solidly back of the butter organizations in their drive to block yellow margarine. Yellow margarine won in 27 counties where dairy products are the most important source of farm income, and lost in only 22.

Market Street

We invite the readers of THE SOYBEAN DIGEST to use "MARKET STREET" for their classified advertising. If you have processing machinery, laboratory equipment, soybean seed, or other items of interest to the industry, advertise them here.

Rate: 5c per word per issue. Minimum insertion $1.00.

WANTED—Mammoth Brown Soybeans for seed. Contact Coppage Long Gin Co., Braggadocio, Mo.

WANTED—Married man 35-45. At least 5 years experience in managing soybean processing plant. Wonderful opportunity for right party. For details write Box 319 I, Soybean Digest, Hudson, Iowa. All replies confidential.

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"This makes the fifth TIPPS DESIGNED SYSTEM in our Plant . . . Have never had any Beans damaged by heat or moisture . . . Would not attempt to operate a Plant without your PNEUMATIC BEAN COOLING SYSTEM . . . Do not see how anyone could afford to . . . Initial cost is very low . . . operating cost practically nothing." Peter Frederickson, Mgr., West Tennessee Soya Mill, Tiptonville, Tenn.

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Thank you Mr. Lyle. Thank you Mr. Frederickson.

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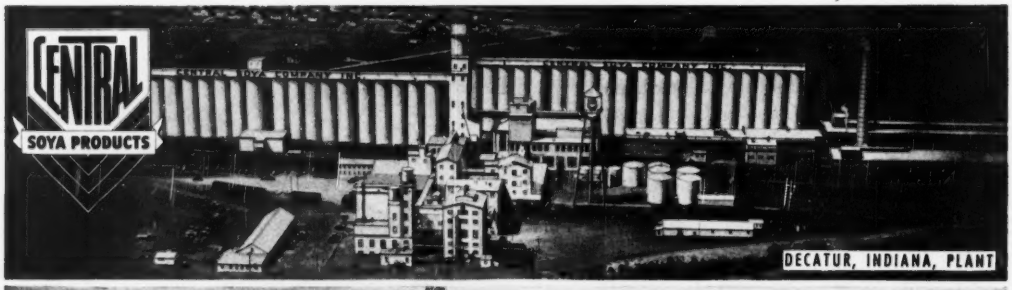

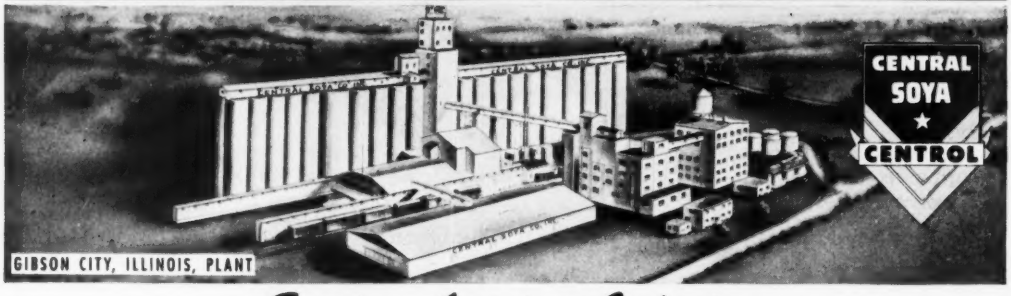

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In The MARKETS

DECEMBER MARKETS SLOW

December markets were draggy affairs.

Soybeans and soybean oil meal both worked somewhat lower than month earlier levels. But soybean oil showed a little strength. Gains, however, were small, and trading other than government purchases was light.

It was government buying that held up the oil market. Government's intention to buy 500 tankcars of crude oil over a 6-month period was confirmed, and 200 tanks were bought in December. U. S. Department of Agriculture bought 25.9 million pounds of crude soybean oil and 6.6 million pounds of hydrogenated refining oil for export to West Germany Dec. 19-23. From July through Dec. 23 the Department bought 96.2 million pounds of crude soybean oil and 15.5 million pounds of the refined oil for German export under ECA.

A strengthening factor in the markets was the prospect for crop controls next year which may make for smaller production and necessitate carrying over larger supplies from one year to the next.

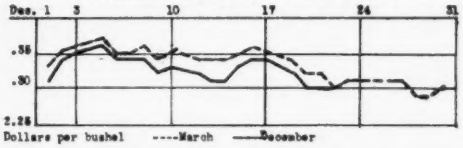
A bearish influence was USDA's December crop reports that further boosted the size of 1949 cotton and soybean crops.

Soybean oil meal production was heavy, more than demand at times. December snow and cold weather helped the meal market to some extent, though real winter is required to bring about marked expansion of demand. ECA authorized 1 million dollars to Norway for purchase of oil cake and meal.

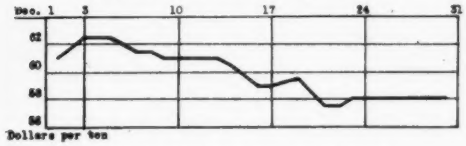
All markets were in the holiday doldrums in late December.

December No. 2 soybeans opened at $2.31, and closed at $2.27, the low. High was $2.36 Dec. 5.

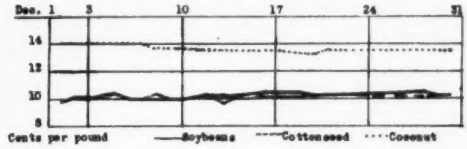
FUTURES CHICAGO NO. 2 SOYBEANS



BULK SOYBEAN OIL MEAL, DECATUR



CRUDE VEGETABLE OIL, TANKCARS



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Bulk soybean oil meal, Decatur, opened at $61 and closed at $58, the low. High was $62.50 Dec. 3-5.

Crude soybean oil in tankcars opened for the month at 9¾c and closed at 10¼c. High for the month was 10½c.

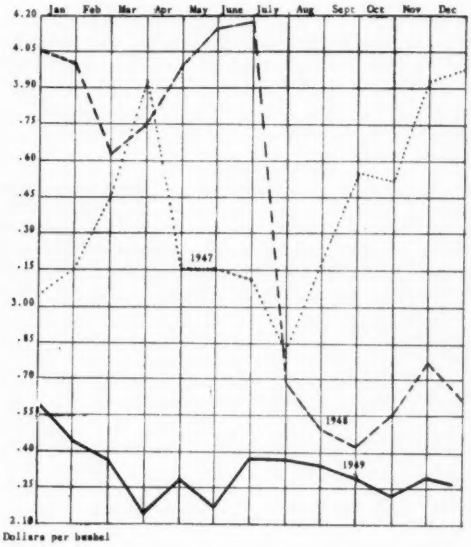
Trading in crude soybean oil began on the Chicago Board of Trade Jan. 3, after being approved by a vote of the members.

Tentative regulations provide that the unit of trading will be 60,000 pounds. All prices shall be basis free on board tank cars at Decatur, Ill., with freight adjustment to New York in multiples of 1/100 of a cent a pound.

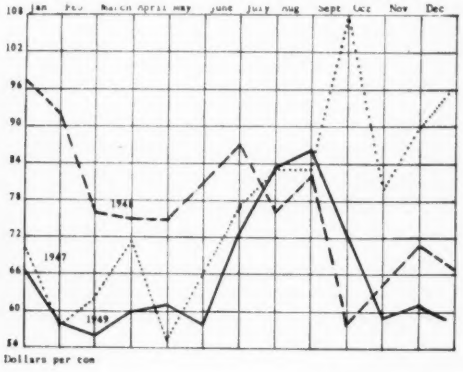
Trading limits will be 2 cents a pound each day, above or below the previous close. Hours of trading will be 9:15 to 1:45 except on Saturday when trading will cease at 10:45.

The initial margin which members must get from customers will be the clearing house requirements as a

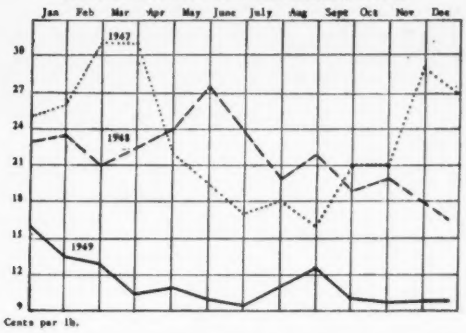
CHICAGO NO. 2 SOYBEANS, FUTURES 1947-49



BULK SOYBEAN OIL MEAL, DECATUR BASIS, 1947-49



CRUDE SOYBEAN OIL, TANKCARS, 1947-49



minimum, except on hedging or spreading transactions, according to Chicago Journal of Commerce.

MEMPHIS SOYBEAN OIL MEAL FUTURES CLOSINGS DEC. 30*
Decatur sacked basis, per ton: Jan., 59.50@60.00; Mar., 61.25@61.70; May, flat 62.10; July, 62.50@62.90; Oct., 56.75@58.00.
Sales: 2,900 tons.

NEW YORK CRUDE SOYBEAN OIL FUTURES CLOSINGS DEC. 30*
Closings: Jan., 10.25b; Feb., 10.10b; Mar., 10.25b; April, 10.25b; June, 10.20b; July, 10.10b; Aug. 10.10n; Nov. and Dec., 9.75n.
Sales: 3 contracts.
* Reported by Chicago Journal of Commerce.

YEAR'S MARKETS

The Soybean market was on a materially lower level during 1949 than for the 2 previous years. The extreme up and down swings of 1948 and 1947 were lacking.

Soybean oil also has held to a substantially lower level than for the past 2 years, and declined generally during 1949.

Weakness in soybeans began in December 1948, affected by the general weakness in fats and oils and the uncertainty in farm markets generally, and continued through March of 1949.

In 1949 soybean oil meal prices have averaged generally under 1947 and 1948, though they roughly followed the pattern of the first half of 1947 and the last half of 1948. There was a summer bulge in meal when processors ran out of soybeans with a scramble for supplies.

The year saw federal decontrol of all fats and oils exports in February.

Bullish influences have been government buying of soybeans and soybean products, and the development of export markets.

Bearish factors were the big oil crops of 1948 and 1949, and the accumulation of large fats and oils supplies.

● **FACTORY USE SOYBEAN OIL.** Factory production of crude soybean oil in October totaled 172,491,000 lbs. compared with 120,756,000 lbs. in September.

Production of refined soybean oil in October totaled 125,902,000 lbs. compared with 127,703,000 lbs. in September.

Factory consumption of crude soybean oil in October totaled 136,426,000 lbs. compared with 138,051,000 lbs. in September. Consumption of refined soybean oil in October was 119,778,000 lbs. compared with 136,199,000 lbs. in September.

Factory and warehouse stocks of crude soybean oil totaled 67,314,000 lbs. Oct. 31 compared with 56,223,000

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lbs. Sept. 30. Stocks of the refined oil were 55,410,000 lbs. Oct. 31; and 56,790,000 lbs. Sept. 30.

Crude soybean oil used in refining totaled 132,763,000 lbs. in October.

Factory consumption of crude soybean oil by uses during October, inedible: soap, 59,000 lbs.; paint and varnish 280,000 lbs.; lubricants and greases 24,000 lbs.; other 1,158,000 lbs.

Consumption of refined soybean oil, edible: shortening 49,630,000 lbs.; other 3,822,000 lbs.; inedible: soap 55,000 lbs.; chemicals 1,063,000 lbs.; paint and varnish 7,023,000 lbs.; linoleum and oilcloth 2,407,000 lbs.; other 5,098,000 lbs.

● OIL MILL PRODUCTS. Reported by Bureau of Census, Department of Commerce.

SOYBEANS: RECEIPTS, CRUSHINGS AND STOCKS AT OIL MILLS, BY STATES, OCTOBER 1949-SEPTEMBER 1949
(Tons of 2,000 pounds)

State	Receipts at mills		Crushed or used		Stocks at mills	
	Oct. 1949	Sept. 1949	Oct. 1949	Sept. 1949	Oct. 31, 1949	Sept. 30, 1949
U. S.	2,114,774	*481,567	525,660	*359,882	1,907,282	*318,168
Arkansas	42,572	(§)	6,997	2,687	41,842	6,267
Illinois	779,789	252,292	201,034	147,667	751,985	173,230
Indiana	215,721	(§)	43,672	36,352	194,961	22,912
Iowa	360,962	* 77,409	92,857	* 66,935	314,581	* 46,476
Kansas	28,590	7,776	15,969	3,895	19,323	6,642
Kentucky	77,753	12,095	18,393	15,532	65,263	5,903
Minnesota	39,442	20,776	28,489	14,627	20,714	9,761
Missouri	92,511	32,290	22,802	16,481	98,568	28,859
Nebraska	(§)	(§)	5,092	(§)	17,017	(§)
N. Carolina	(§)	(§)	893	(§)	8,614	(§)
Ohio	332,443	17,497	60,776	48,450	279,106	7,439
Oklahoma	(§)		(§)		(§)	
All other	144,991	61,432	28,746	7,256	95,308	10,679

*Revised.
§ Included in "All other" to avoid disclosure of individual operations.

SOYBEAN PRODUCTS: PRODUCTION AND STOCKS AT OIL MILL LOCATIONS, BY STATES, OCTOBER 1949-SEPTEMBER 1949

State	Crude oil (thousand pounds)				Cake and meal (tons)			
	Production		Stocks		Production		Stocks	
	Oct. 1949	Sept. 1949	Oct. 31, 1949	Sept. 30, 1949	Oct. 1949	Sept. 1949	Oct. 31, 1949	Sept. 30, 1949
U. S.	172,491	120,756	29,840	20,012	414,499	279,859	35,892	13,317
Ark.	2,078	883	561	(*)	5,556	2,150	1,382	(*)
Illinois	67,814	50,420	8,309	6,548	150,566	109,618	9,256	3,781
Indiana	13,999	12,098	2,202	1,168	34,814	28,704	1,415	1,146
Iowa	30,299	22,447	5,405	4,226	76,017	55,395	5,867	3,150
Kansas	5,246	1,402	1,237	542	13,169	3,329	1,896	(*)
Kentucky	6,270	5,656	860	415	14,536	12,261	826	397
Minn.	8,944	4,780	1,840	1,403	23,423	11,718	3,719	206
Mo.	6,926	5,260	1,124	811	18,872	13,232	2,011	1,997
Neb.	1,579	(*)	577	(*)	4,310	(*)	(*)	(*)
N. C.	244	(*)	584	(*)	711	(*)	426	(*)
Ohio	20,194	15,583	4,270	3,021	49,194	37,665	2,597	1,308
Oklahoma	(*)	—	(*)	—	(*)	—	(*)	(*)
Texas	—	—	—	—	—	—	—	—
All other	8,898	2,227	2,871	1,878	23,331	5,787	6,497	1,332

*Included in "All other" to avoid disclosure of individual operations.

PRIMARY PRODUCTS EXCEPT CRUDE OIL, AT CRUDE OIL MILL LOCATIONS: PRODUCTION, SHIPMENTS AND TRANSFERS AND STOCKS, OCTOBER 1949-SEPTEMBER 1949

Products	Production		Shipments and transfers		End of month stocks	
	Oct. 1949	Sept. 1949	Oct. 1949	Sept. 1949	Oct. 31, 1949	Sept. 30, 1949
SOYBEAN:						
Cake and meal*	414,499	279,859	391,924	286,918	35,892	13,317
Lecithin**	1,053,216	899,495	1,071,440	1,041,444	822,405	840,629
Edible soy flour, full fat*	(§)	(§)	(§)	394	(§)	(§)
Edible soy flour, other**	7,685	4,755	7,441	4,857	1,355	1,111
Industrial soy flour**	(§)	(§)	(§)	(§)	(§)	(§)

* Unit of measure in tons
** Unit of measure in pounds.
§ Not shown to avoid disclosure of individual operations.

● SOYBEAN INSPECTIONS. Inspected receipts of soybeans dropped sharply in November to a total of 12,432 cars compared with 44,153 cars in October, according to reports to the Department of Agriculture. November inspections brought the total for the first 2 months of the current season to 56,585 cars compared with 51,702 cars for the same period last year.

The 5-year average for the month of November for the crop years 1943-47 was 18,085 cars.

The quality of the soybeans inspected in November was considerably below that for the preceding month, only 57 percent grading No. 2 or better compared with 86 percent in October.

Inspections of soybeans in November included the equivalent of 426 cars inspected as cargo lots and truck receipts equal to about 659 cars.*

* Cargo and truck receipts converted to carlots on basis of 1,650 bushels equal 1 carlot.

● SOYBEAN STOCKS. Production and Marketing Administration's commercial grain stock reports for Nov. 28-Dec. 27.

	Nov. 28	Dec. 6	Dec. 13	Dec. 20	Dec. 27
Atlantic Coast	969	1,268	2,774	3,081	1,646
Gulf Coast	534	404	638	650	583
Northwestern and Upper Lake	813	981	1,012	1,040	1,063
Lower Lake	6,681	6,811	7,070	7,273	7,022
East Central	8,225	2,855	2,806	3,070	3,060
West Central					
Southwestern & Western	3,376	3,392	3,394	3,334	3,163
Total current week	15,598	15,711	17,694	18,448	16,537
Total Year ago	15,064	14,906	15,923	15,108	15,636

● UNDER PRICE SUPPORT. A total of 1,509,860 bushels of soybeans had been put under Commodity Credit Corporation price support by the end of October, U. S. Department of Agriculture has announced.

The great bulk of supported soybeans were under loan in warehouse storage, said USDA.

The soybeans placed under price support in the July-October period totaled as follows: Loans, farm stored 154,948 bushels; warehouse stored 1,265,956 bushels. Purchase agreements 88,956 bushels.

● SOYBEAN GLUE. Consumption of soybean glue by the softwood plywood industry in October was 3,130,000 lbs. compared with 2,977,000 lbs. in September; and 3,266,000 lbs. in Oct. 1948, reports Bureau of the Census.

Consumption of phenolic resin glue in October was 2,906,000 lbs. Total consumption of all glues in October was 6,714,000 lbs. compared with 6,327,000 lbs. in September and 7,417,000 lbs. in Oct. 1948.

Stocks of soybean glue Oct. 31 totaled 1,523,000 lbs.; Sept. 30, 1,348,000 lbs.; Oct. 31, 1948, 1,518,000 lbs.

● SHORTENING SHIPMENTS. Reported by the Institute of Shortening and Edible Oils, Inc., in pounds.

Week ending Dec. 3	5,308,576
Week ending Dec. 10	5,549,891
Week ending Dec. 17	4,884,231
Week ending Dec. 24	3,853,048

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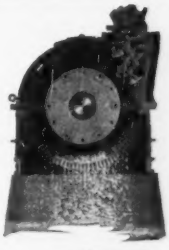

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BLAMES STANDARDS FOR POOR SOYBEANS

TO THE EDITOR:

I read your editorial, "It's Time to Clean House," in the last issue of the Soybean Digest. I note that you were placing the blame for the poor quality of soybeans shipped to Europe on all segments of the industry.

It seems to me that the crux of this whole problem lies with the government in view of the fact that the standards for commercial soybeans have been far too loose to insure uniform, high-grade quality. As you know, this past year the grading standards were relaxed, permitting a much higher percentage of dockage and foreign material than ever before.

This situation has led to blending practices which have caused much of the confusion such as you have related. Just so long as our grading standards permit a high percentage of foreign materials, you are going to have a flood of complaints on the part of commercial users, whether they be located in Europe or right here at home.

One of the most serious problems the processor has this season is the problem of high dockage and foreign material content in soybeans as permitted by the more recently promulgated standards.

It seems to me it is to the interest of the grower in order to insure a broad world market for our American grown soybeans to have much more rigid standards promulgated for our commercial grade of soybeans.—*Whitney H. Eastman, president chemical division, General Mills, Inc., Minneapolis, Minn.*

Manchurians Better

TO THE EDITOR:

I was pleased with the articles from your hand which appeared in October and November under the titles, "It's Time to Clean House," and "We can Lose European Markets."

I fully share your opinion and I think there is certainly a big risk for American soybeans that they will lose the European markets as soon as soybeans from Manchuria are offered again. The only way to prevent this danger would be to improve the quality, but the arrivals of American soybeans which we have seen here during the last season certainly do not show improvement, and, in my opinion, are even worse in quality than they were before.

In my opinion the fault does not lie with the farmers only, but also with the regulations applicable to the trade in American soybeans. The dockage must remain under 1 percent, but if it is .99 percent the buyers have no claim. The maximum percentage of admixture or foreign material, which was formerly 2 percent has been increased to 3 percent, which shows that if the beans contain as much as 2.99 percent of material which is of no use to the oilmills, the receivers are not entitled to any allowance.

If you compare these conditions with the conditions on which the Manchurian beans are being sold, namely basis 98 percent pure, and then take into consideration that the 2 percent admixture which the contract allowed was never reached and usually was negligible, you will realize that the condition of the American beans from a buyer's point of view compares very unfavorably with the condition of the Manchurian beans.

Further, I have the impression that the beans which are being exported from the United States are of a poorer buying. The American mills know exactly where in a certain season the best quality is obtainable. It seems that one year they prefer beans from State 'A', while next year crop conditions may make it attractive not to buy the beans from that state, but from State 'B' or 'C'. The American mills know these quality differences and their buyers pick out the best by dealers and transport to the storage places in the ocean ports, from where they can be shipped as long as the certificates issued by or in the name of the Department of Agriculture allow this.

In my opinion it would be an improvement if the conditions against which the American beans are being sold could be made more stringent and more in line with the conditions of the Manchurian soybeans. — *A. G. Stoon, Unilever Grondstoffen Maatschappu N. V., Rotterdam, Holland.*

LETTERS

"FOR STREET SWEEPING"

A Christmas present, sender unknown, is inspected by Digest Editor Geo. M. Strayer. A correspondent had written him she would rather sweep the streets of Hudson than to allow her name to be associated with soybeans (See this page December issue). Somebody plainly intended to help him on with the job of sweeping Hudson's streets. Included with the broom was a pound of margarine.

Commends Association

TO THE EDITOR:

We feel that the Association apparently has helped considerably in contributing to the large volume of exports of soybeans and soybean oil to Europe this year. At the same time we believe you should be commended for pointing out, as you have so effectively done in your recent editorials in the Soybean Digest, the danger of exporting to foreign markets soybeans of inferior quality if we hope to expand permanently our foreign outlets.—*Olav F. Anderson, Agricultural Economist, International Commodities Branch, United States Department of Agriculture, Washington 25, D.C.*

Opposes Campaign

TO THE EDITOR:

I am not renewing my subscription to the Soybean Digest. Am in the dairy business as a sideline and not happy over the margarine campaign carried on by the Digest.—*Paul J. Thompson, Minneapolis, Minn.*

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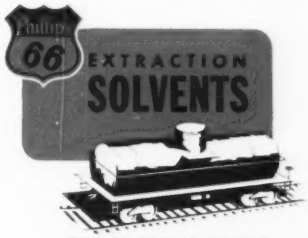

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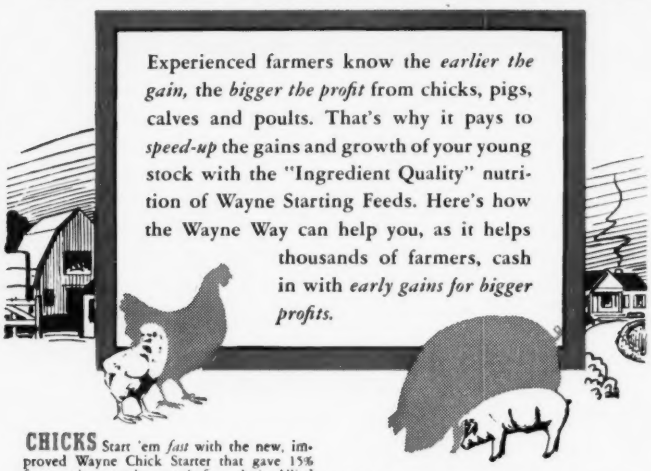

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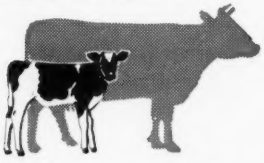

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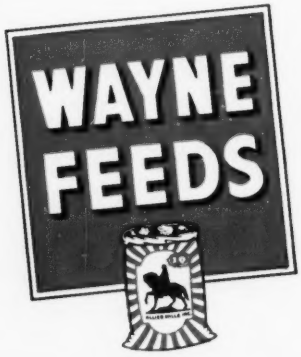

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